

access: the act that encompasses the references to and retrieval of data.

action specification: in an ON statement, the on-unit or the single keyword SYSTEM, either of which specifies the action to be taken whenever a" interrupt results from raising of the named on-condition. The action specification can also include the keyword SNAP.

activate (a block): to initiate the execution of a block. A procedure block is activated when it is invoked at any of its entry points; a begin block is activated when it is encountered in normal flow of control, including a branch.

activation (of a block):

1. The process of activating a block.
2. The execution of a block.

activation (of a preprocessor variable or entry name): the establishment of the validity for replacement of the value of a variable or the returned value of a" entry name. The first activation must be the result of the appearance of the name in a %DECLARE statement. If a" active variable or entry name is made inactive by a %DEACTIVATE statement it may be activated again by a %ACTIVATE statement.

active:

1. The state of a block after activation and before termination.
2. The state in which a preprocessor variable or preprocessor entry name is said to be when its value can replace the corresponding identifier in source program text.
3. The state in which a" event variable is said to be during the time it is associated with a" asynchronous operation. An event variable remains active and, hence, cannot be associated with another operation until a WAIT statement specifying that event variable has been executed or, in the case of a" event variable associated with a task, until a" EXIT, RETURN, or END statement has caused termination of the task.
4. The state in which a task variable is said to be when its associated task is attached.

5. The state in which a task is said to be before it has been terminated.

additive butes: attributes for which there are no defaults and which, if required, must always be added to the list of specified attributes or be implied (i.e., they have to be added to the set of attributes, if they are required).

address: a specific storage location at which data item can be stored.

adjustable extent: bound (of an array), length (of a string), or size (of a" area) that may be different for different generations of the associated variable. Adjustable bounds, lengths, and sizes are specified as expressions or asterisks (or by REFER options for based variables), which are evaluated separately for each generation. They cannot be used for static variables.

aggregate: see data aggregate.

aggregate expressions: an array expression or a structure expression.

alignment: the storing of data items in relation to certain machine-dependent boundaries.

allocated variable: a variable with which main storage has been associated and not freed.

allocation:

1. The reservation of main storage for a variable.
2. A generation of a" allocated variable.

alphabetic character: any of the characters A through Z of the English alphabet and the alphabetic extenders #, \$, and a (which may have different graphic representation in different countries).

alphanumeric character: a" alphabetic character or a digit.

alternative attribute: a" attribute that may be chosen from a group of two or more alternatives. If none is specified, a default is assumed.

ambiguous reference: a reference that is not sufficiently qualified to identify one and only one name known at the point of reference.

ancestral task: the attaching task or any of the tasks in a direct line from the given task to, and including, the major task.

area: a declared portion of contiguous main storage identified by an area variable and reserved, on allocation, for the allocation of based Variables.

area variable: a variable with the AREA attribute; its values may only be areas.

argument: an expression in an argument list as part of a procedure reference.

argument list: a parenthesized list of one or more arguments, separated by commas, following an **entry-name** constant, a **entry-name** variable, a generic name, or a built-in function name. The list is passed to the parameters of the entry point.

arithmetic constant: a fixed-point constant or a floating-point constant. Although most arithmetic constants can be signed, the sign is not part of the constant.

arithmetic conversion: the transformation of a value from one arithmetic representation to another.

arithmetic data: data that has the characteristics of base, scale, mode, and precision. It includes coded arithmetic data and pictured numeric character data.

arithmetic operators: either of the prefix operators + and -, or any of the following infix operators: + - * / %

arithmetic picture data: decimal picture data or binary picture data containing the following types of picture Specification characters.

1. Decimal digit characters.
2. Zero-suppression characters,
3. Sign and currency symbol characters.
4. Insertion characters.
5. Commercial characters.
6. Exponent characters.

array: a named, ordered collection of data elements, all of which have identical attributes. An array has dimensions specified by the dimension attribute, and its individual elements are referred to by subscripts. A **array** can also be a **array** ordered collection of identical structures.

array expression: a **array** expression whose

evaluation yields a **array** of values.

array of structures: an ordered collection of identical structures specified by giving the dimension attribute to a structure name.

assignment: the process of giving a value to a variable.

asynchronous operation: the overlap of an Input/output operation with the execution of Statement* or the concurrent execution of procedures using multiple flows of control for different tasks.

attachment of a task: the invocation of a procedure-and the establishment of a separate flow of control to execute the invoked procedure (and procedures it invokes) asynchronously with execution of the invoking procedure.

attention: a **attention** occurrence, external to a task, that could cause a **attention** interrupt to the task.

attribute:

1. A descriptive property associated with a name to describe a characteristic of items that the name may represent.
2. A descriptive property used to describe a characteristic of the result of evaluation of a **array** expression.

automatic storage allocation: the allocation of Storage for automatic variables.

automatic variable: a variable that is allocated automatically at the activation of a block and released automatically at the termination of that block.

base: the number system in terms of which a **base** arithmetic value is represented.

base element: the name of a Structure member that is not a minor structure.

base item: the automatic, controlled, or static variable or the parameter upon which a defined variable is defined. The name may be qualified and/or subscripted.

based storage allocation: the allocation of Storage for based variables.

based variable: a variable whose generations are identified by locator variables. A based variable can be used to refer to values of a variable of any storage class; it can also be allocated and freed explicitly by use of the ALLOCATE and FREE statements.

begin block: a collection of statements headed by a BEGIN statement and ended by an END statement that is a part of a program that delimits the scope of names and that is activated by normal sequential flow of control, including any branch resulting from a GO TO statement.

binary: the number system based on the number 2.

bit: a binary digit (0 or 1).

bit string: a string composed of zero or more bits.

bit-string operators: the logical operators \neg (not), \wedge (and), and \vee (or).

block: a begin block or procedure block.

block heading statement: the PROCEDURE or BEGIN statement that heads a block of statements.

bounds: the upper and lower limits of an array dimension.

buffer: intermediate storage, used in input/output operations, into which a record is read during input and from which a record is written during output.

built-in function: a function that is supplied by the language.

call: (verb) to invoke a subroutine by means of the CALL statement or CALL option; (noun) such an invocation.

character set: a defined collection of characters. See language character set and data character set.

character string: a string composed of, zero or more characters.

character-string picture data: data described by a picture specification which must have at least one A or X picture specification character.

closing (of a file): the dissociation of a file from a data set.

coded arithmetic data: arithmetic data that is stored in a form that is acceptable, without conversion, for arithmetic calculations.

comment: a string of zero or more characters used for documentation, that is preceded by /* and terminated by */ and which is a separator.

commercial character: the following picture specification characters;

1. CR (credit).
2. DB (debit).
3. T, I, and R, the overpunched-sign characters, which indicate that the associated position in the data item contains or may contain a digit with an overpunched sign and that this overpunched sign is to be considered in the character string value of the data item.

comparison operators: infix operators used in comparison expressions. They are $\neg<$ (not less than), $<$ (less than), $<=$ (less than or equal to), $\neg=$ (not equal to), $=$ (equal to), $>=$ (greater than or equal to), $>$ (greater than), and $\neg>$ (not greater than).

compile time: in general, the time during which a source program is translated into an object module. In PL/I, it is the time during which a source program can be altered (preprocessed), if desired, and then translated into an object program.

compile-time statements: see preprocessor statements.

complex data: arithmetic data, each item of which consists of a real part and an imaginary part.

composite operators: an operator composed of two operator symbols, e.g., $\neg>$

compound statement: a statement that contains other statements. IF and ON are the only compound statements.

concatenation: the operation that joins two strings in the order specified, thus forming one string whose length is equal to the sum of the lengths of the two strings. It is specified by the operator ||.

condition: see on-conditions.

condition list: a list of one or more condition prefixes.

condition name: a language keyword (or CONDITION followed by a parenthesized programmer-defined name) that denotes an on-condition that might arise within a task.

condition prefix: a parenthesized list of one or more language condition names, prefixed to a statement. It specifies whether the named on-conditions are to be enabled.

connected reference: a reference to connected storage; it must be apparent, prior to execution of the program, that the

storage is connected.

connected storage: main storage of an uninterrupted linear sequence of items that can be referred to by a single name.

constant: an arithmetic or string data item that does not have a name and whose value cannot change; an unsubscripted label prefix or a file name or an entry name.

contained text: all text in a procedure (including nested procedures) except its entry names and condition prefixes of the PROCEDURE statement; all text in a begin block except labels and condition prefixes of the BEGIN statement that heads the block. Internal blocks are contained in the external procedure.

contextual declaration: the appearance of an identifier that has not been explicitly declared, in a context that allows the association of specific attributes with the identifier.

control format item: a specification used in edit-directed transmission to specify positioning of a data item within the stream or printed page.

control variable: a variable used to control the iterative execution of a group. See iterative do-group.

controlled parameter: a parameter for which the CONTROLLED attribute is specified in a declare statement; it can be associated only with arguments that have the CONTROLLED attribute.

controlled storage allocation: the allocation of storage for controlled variables.

controlled variable: a variable whose allocation and release are controlled by the ALLOCATE and FREE statements, with access to the current generation only.

conversion: the transformation of a value from one representation to another to conform to a given set of attributes.

cross section of an array: the elements represented by the extent of at least one dimension of an array. An asterisk in the place of a subscript in an array reference indicates the entire extent of that dimension.

current generation: that generation (of an automatic or controlled variable) currently available by reference to the name of the variable.

data: representation of information or of value in a form suitable for processing.

data aggregate: a logical collection of two or more data items that can be referred to either collectively or individually; an array or structure.

data character set: all of those characters whose representation is recognized by the computer in use.

data-directed transmission: the type of stream-oriented transmission in which data is transmitted as a group, comprising one or more items separated by commas or blanks, terminated by a semicolon, where each item is of the form:

name = value

The name can be qualified and/or subscripted.

data format item: a specification used in edit-directed transmission to describe the representation of a data item in the stream.

data item: a single unit of data; it is synonymous with element.

data list: a parenthesized list of expressions or repetitive specifications, separated by commas, used in a stream-oriented input or output specification that represents storage locations to which data items are to be assigned during input or values which are to be obtained for output.

data set: a collection of data external to the program that can be accessed by the program by reference to a single file name.

data specification: the portion of a stream-oriented data transmission statement that specifies the mode of transmission (DATA, LIST, or EDIT) and includes the data list (or lists) and, for edit-directed mode, the format list (or lists).

data stream: data being transferred from or to a data set by stream-oriented transmission, as a continuous stream of data elements in character form.

data transmission: the transfer of data from a data set to the program or vice versa.

deactivated: the state in which a preprocessor variable or entry name is said to be when its value cannot replace the corresponding identifier in source program text.

decimal: the number system based on the number 10.

decimal digit character: the picture specification character 9.

decimal picture data: arithmetic picture data specified by picture specification characters containing the following types of picture specification characters:

1. Decimal digit characters.
2. The virtual point picture character.
3. Zero-suppression characters.
4. Sign and currency symbol characters.
5. Insertion characters.
6. Commercial characters.
7. Exponent characters.

declaration:

1. The establishment of an identifier as a name and the construction of a set of attributes (partial or complete) for it.
2. A source of attributes of a particular name.

default: the alternative attribute or option assumed, or specified for assumption by the DEFAULT statement, when no such attribute or option has been specified.

defined item: a variable declared to represent part or all of the same storage as that assigned to another variable known as the base item.

delimiter: all operators, comments, and the following characters: percent, parentheses, comma, period, semicolon, colon, assignment symbol, and blank; they define the limits of identifiers, constants, picture specifications, ISUBS, and keywords.

descriptor: see parameter descriptor.

digit: one of the characters 0 through 9.

dimensionality: the number of bounds specifications in an array declaration.

disabled: the state in which a particular on-condition will not result in an interrupt that would cause an on-unit for that condition to be entered.

do-group: a sequence of statements headed by a DO statement and ended by its corresponding END statement, used for control purposes.

do loop: see iterative do-group.

drifting-characters: see sign and currency symbol characters.

dummy argument: temporary storage that is created automatically to hold the value of an argument that cannot be passed by reference.

edit-directed transmission: the type of stream-oriented transmission in which data appears as a continuous stream of characters and for which a format list is required to specify the editing desired for the associated data list.

element: a single item of data as opposed to a collection of data items such as an array; a scalar item.

element expression: an expression whose evaluation yields an element value.

elementary name: see base element.

element variable: a variable that represents an element; a scalar variable.

enabled: that state in which a particular on-condition will result in a program interrupt that would cause an on-unit for that condition to be entered.

entry constant: an entry name.

entry expression: an expression whose evaluation yields an entry value.

entry name: an identifier that is explicitly or contextually declared to have the ENTRY attribute (unless the VARIABLE attribute is given) or has an implied ENTRY attribute; the value of an entry variable.

entry point: a point in a procedure at which it may be invoked. (See primary entry point and secondary entry point.)

entry variable: a variable that can represent entry values. It must have both the ENTRY and VARIABLE attributes.

entry value: the entry point represented by an entry constant; the value includes the environment of the activation that is associated with the entry constant.

environment (of an activation): information associated with the invocation of a block that is used in the interpretation of references, within the invoked block, to data declared outside the block. This information includes generations of automatic variables, extents of defined variables, and generations of parameters.

environment (of a label constant): identity of the particular activation of a block to which a reference to a statement-label constant applies. This information is determined at the time a statement-label

constant is passed as an argument or is assigned to a statement-label variable, and it is passed or assigned along with the constant.

epilogue: those processes that occur automatically at the termination of a block or task.

evaluation: reduction of an expression to a single value, an array of values, or a structured set of values.

event: an activity in a program whose status and completion can be determined from an associated event variable.

event variable: a variable with the EVENT attribute, which may be associated with an event; its value indicates whether the action has been completed and the status of the completion.

explicit declaration: the appearance of an identifier in a DECLARE statement, as a label prefix, or in a parameter list.

exponent characters: the following picture specification characters:

1. K and E, which are used in floating-point picture specifications to indicate the beginning of the exponent field.
2. F, the scaling factor character, specified with an integer constant which indicates the number of decimal positions the decimal point is to be moved from its assumed position to the right (if the constant is positive) or to the left (if the constant is negative).

expression: a notation, within a program, that represents a value, an array of values, or a structured set of values; a constant or a reference appearing alone, or combinations of constants and/or references with operators.

extent:

1. The range indicated by the bounds of an array dimension, the range indicated by the length of a string, or the range indicated by the size of an area.
2. The significant allocations in an area.

external name: a name (with the EXTERNAL attribute) whose scope is not necessarily confined only to one block and its contained blocks.

external procedure: a procedure that is

not contained in any other procedure.

factoring: the application of one or more attributes or of a level number to a parenthesized list of names.

field (in the data stream): that portion of the data stream whose width, in number of characters, is defined by a single data or spacing format item.

field (of a picture specification): any character-string picture specification or that portion (or all) of a numeric character picture specification that describes a fixed-point number.

file: a named representation, within a program, of a data set or data sets. A file is associated with the data set or data sets for each opening.

file attribute: any of the attributes that describe the characteristics of a file.

file constant: a name declared for a file and for which a complete set of file attributes exists during the time that the file is open.

file expression: an expression whose evaluation yields a file name.

file name: a name declared for a file.

file variable: a variable to which file constants can be assigned; it must have both the attributes FILE and VARIABLE. No file-name attributes, other than FILE, can be specified for a file-name variable.

fixed-point constant: see arithmetic constant.

floating-point constant: see arithmetic constant.

flow of control: sequence of execution.

format item: a specification used in edit-directed transmission to describe the representation of a data item in the stream (data format item) or to specify positioning of a data item within the stream (control format item).

format list: a parenthesized list of format items required for an edit-directed data specification.

fully-qualified name: a qualified name that is complete, i.e., that includes all names in the hierarchical sequence above the structure member to which the name refers, as well as the name of the member itself.

function: a function procedure

(programmer-specified or built-in); a procedure that is invoked by the appearance of one of its entry names in a function reference and which returns a value to the point of reference.

function reference: the appearance of an entry-name or built-in function name (or an entry variable) in an expression.

generation (of a variable): the allocation of a static variable, a particular allocation of a controlled or automatic variable or the storage indicated by a particular locator qualification of a based variable, or by a defined variable or a parameter.

generic key: a character string that identifies a class of keys: all keys that begin with the string are members of that class. For example, the recorded keys 'ABCD', 'ABCE', and 'ABDF', are all members of the classes identified by the generic keys 'A' and 'AB', and the first two are also members of the class 'ABC'; and the three recorded keys can be considered to be unique members of the classes 'ABCD', 'ABCE', 'ABDF', respectively.

generic name: the name of a family of entry names. A reference to the name is replaced by the particular entry name whose parameter descriptors match the attributes of the arguments in the argument list at the point of invocation.

group: a do-group or a select-group; it can be used wherever a single statement can appear, except as an on-unit.

identifier: a string of alphameric and, possibly, break characters, not contained in a comment or constant and which is preceded and followed by a separator; the initial character must be alphabetic.

implicit declaration: the establishment of an identifier, which has no explicit or contextual declaration, as a name. A default set of attributes is assumed for the identifier.

implicit opening: the opening of a file as the result of an input or output statement other than the OPEN statement.

infix operator: an operator that appears between two operands.

initial procedure: an external procedure whose PROCEDURE statement has the OPTIONS (MAIN) attribute. Every PL/I program must have an initial procedure. It is invoked automatically as the first step in the execution of a program.

input/output: the transfer of data between

an auxiliary medium and main storage.

insertion picture character: a picture specification character that is, on assignment of the associated data to a character string, inserted in the indicated position. When used in a P-format item for input, an insertion character serves as a checking picture character.

interleaved array: an array whose name refers to non-connected storage.

interleaved subscripts: a subscript notation, used with subscripted qualified names, in which not all of the necessary subscripts immediately follow the same component name.

internal block: a block that is contained in another block.

internal name: a name that is not known outside the block in which it is declared.

internal procedure: a procedure that is contained within a block.

internal text: all of the text contained in a block except that text that is contained in another block. Thus the text of an internal block (except its entry names) is not internal to the containing block.

interrupt: the redirection of flow of control of the program (possibly temporary) as the result of an on-condition or attention.

invocation: the activation of a procedure.

invoke: to activate a procedure at one of its entry points.

invoked procedure: a procedure that has been activated at one of its entry points.

invoking block: a block containing a statement that activates a procedure.

iteration factor: an expression that specifies:

1. In an INITIAL attribute specification, the number of consecutive elements of an array that are to be initialized with a given constant.
2. In a format list, the number of times a given format item or list of items is to be used in succession.

iterative do-group: a do-group whose DO statement specifies a control variable and/or a WHILE option.

key: data that identifies a record within

a direct-access data set. See source key and recorded key.

keyword: an identifier that is part of the language and which, when used in the proper context, has a specific meaning to the compiler.

known: (applied to a name) recognized with its declared meaning; a name is known throughout its scope.

label: a name used to identify a statement other than a PROCEDURE or ENTRY statement; a statement label.

label constant: an unsubscripted name that appears prefixed to any statement other than a PROCEDURE or ENTRY statement.

label list (of a statement): all of the label prefixes of a statement.

label list (of a label variable declaration): a parenthesized list of one or more statement-label constants immediately following the keyword LABEL to specify the range of values that the declared variable may have; names in the list are separated by commas. When specified for a label array, it indicates that each element of the array may assume any of the values listed but no other.

label prefix: a label prefixed to a statement.

label variable: a variable declared with the LABEL attribute and thus able to assume as its value a label constant.

language character set: a character set which has been defined to represent program elements in the source language (in this context, character-string constants and comments are not considered as program elements).

leading zeros: zeros that have no significance in the value of an arithmetic integer; all zeros to the left of the first significant integer digit of a number.

level number: an unsigned decimal integer constant in a DECLARE or ALLOCATE statement that specifies the position of a name in the hierarchy of a structure. It precedes the name to which it refers and is separated from that name by the name's delimiter. Level numbers appear without the names in a parameter descriptor of an ENTRY attribute specification.

level-one variable: a major structure name; any unsubscripted variable not contained within a structure.

list-directed transmission: the type of

stream-oriented transmission in which data in the stream appears as constants separated by blanks or commas and for which formatting is provided automatically.

locator qualification: in a reference to a based variable, either a locator variable or function reference connected by an arrow to the left of a based variable to specify the generation of the based variable to which the reference refers, or the implicit connection of a locator variable with the based reference.

locator variable: a variable whose value identifies the location in main storage of a variable or a buffer.

locked record: a record in an EXCLUSIVE DIRECT UPDATE file that is available to only one task at a time.

logical level (of a structure member): the depth indicated by a level number when all level numbers are in direct sequence, that is, when the increment between successive level numbers is one.

logical operators: the bit-string operators ~ (not), & (and), and | (or).

lower bound: the lower limit of an array dimension.

major structure: a structure whose name is declared with level number 1.

major task: the task that has control at the outset of execution of a program. It exists throughout the execution of the program.

minor structure: a structure that is contained within another structure. The name of a minor structure is declared with a level number greater than one.

mode (of arithmetic data): a characteristic of arithmetic data; real or complex.

multiple declaration: two or more declarations of the same identifier internal to the same block without different qualifications, or two or more external declarations of the same identifier with different attributes in the same program.

multiprocessing: the use of a computing system with two or more processing units to execute two or more programs simultaneously.

multiprogramming: the use of a computing system to execute more than one program concurrently, using a single processing unit.

multitasking: a facility that allows a programmer to execute more than one PL/I procedure simultaneously.

name: an identifier appearing in a context where it is not a keyword.

nesting: the occurrence of:

1. A block within another block.
2. A group within another group.
3. An IF statement in a THEN clause or an ELSE clause.
4. A function reference as an argument of a function reference.
5. A remote format item in the format list of a FORMAT statement.
6. A parameter descriptor list in another parameter descriptor list.
7. An attribute specification within a parenthesized name list for which one or more attributes are being factored.

non-connected storage: separate locations in storage that contain related items of data that can be referred to by a single name but that are separated by other data items not referred to by that name. Examples are the storage referred to by an unsubscripted elementary name in an array of structures or by a subscripted name referring to an array cross section in which the subscript list contains an asterisk to the left of any element expression.

null locator value: a special locator value that cannot identify any location in internal storage; it gives a positive indication that a locator variable does not currently identify any generation of data.

null string: a string data item of zero length.

numeric character data: see decimal picture data.

offset variable: a locator variable with the OFFSET attribute, whose value identifies a location in storage, relative to the beginning of an area.

on-condition: an occurrence, within a PL/I task, that could cause a program interrupt. It may be the detection of an unexpected error or of an occurrence that is expected, but at an unpredictable time.

on-unit: the specified action to be executed upon detection of the on-condition named in the containing ON statement. This

excludes SYSTEM and SNAP.

opening (of a file): the association of a file with a data set and the completion of a full set of attributes for the file name.

operand: an expression to whose value an operator is applied.

operational expression: an expression containing one or more operators.

operator: a symbol specifying an operation to be performed. See arithmetic operators, bit-string operators, comparison operators and concatenation.

option: a specification in a statement that may be used to influence the execution or interpretation of the statement.

packed decimal: the internal representation of a fixed-point decimal data item.

padding:

1. one or more characters or bits concatenated to the right of a string to extend the string to a required length. For character strings, padding is with blanks; for bit string, with zeros.
2. one or more characters or bits inserted in a structure so that the structure elements have the required alignment.

parameter: a name in a procedure that is used to refer to an argument passed to that procedure.

parameter descriptor: the set of attributes specified for a single parameter in an ENTRY attribute specification.

parameter descriptor list: the list of all parameter descriptors in an ENTRY attribute specification.

parameter list: a parenthesized list of one or more parameters, separated by commas following either the keyword PROCEDURE in a PROCEDURE statement, or the keyword ENTRY in an ENTRY statement. The list corresponds to a list of arguments passed at invocation.

partially-qualified name: a qualified name that is incomplete, i.e., that includes one or more, but not all, names in the hierarchical sequence above the structure member to which the partially-qualified name refers, as well as the name of the member itself.

picture specification: a character-by-

character description of the composition and characteristics of decimal picture data and character-string picture data.

picture specification character: any of the characters that can be used in a picture specification. See decimal picture data and character-string picture data.

point of invocation: the point in the invoking block at which the procedure referenced to the invoked procedure appears.

pointer variable: a locator variable with the POINTER attribute, whose value identifies an absolute location in main storage.

precision: the value range of an arithmetic variable expressed as a total number of digits and, for fixed-point variables, the number of those digits assumed to appear to the right of the decimal or binary point.

prefix: a label or a parenthesized list of one or more condition names connected by a colon to the beginning of a statement.

prefix operator: an operator that precedes an operand and applies only to that operand. The prefix operators are + (plus), - (minus), and ~ (not).

preprocessor: a program that examines the source program for preprocessor statements which are then executed, resulting in the alteration of the source program.

preprocessor statement: a special statement appearing in the source program that specifies how the source program text is to be altered; it is executed as it is encountered by the preprocessor.

primary entry point: the entry point identified by any of the names in the label list of the PROCEDURE statement.

priority: a value associated with a task, that specifies the precedence of the task relative to other tasks.

problem data: string or arithmetic data that is processed by a PL/I program.

procedure: a collection of statements, headed by a PROCEDURE statement and ended by an END statement, that is a part of a program, that delimits the scope of names, and that is activated by a reference to one of its entry names.

procedure reference: an entry constant or variable or a built-in function name. The name may be followed by one or more argument lists. It may appear in a CALL statement or CALL option or as a function

reference.

processor: a program that prepares source program text (possible preprocessed text) for execution.

program: a set of one or more external procedures, one of which must have the OPTIONS(MAIN) option in its PROCEDURE statement.

program control data: data used in a PL/I program to effect the execution of the program. Program control data consists of the following types: entry, task, file, label, event, pointer, offset, and area.

prologue: the processes that occur automatically on block activation.

pseudovalue: any of the built-in function names that can be used to specify a target variable.

qualified name: a hierarchical sequence of names of structure members, connected by periods, used to identify a component of a structure. Any of the names may be subscripted. See also locator qualification.

range (or default specification): a set of qualifiers and/or parenthesized descriptors to which the attribute in a default specification of a DEFAULT statement apply.

record: the logical unit of transmission in a record-oriented input/output operation.

recorded key: a key recorded in a direct-access volume to identify an associated data record.

recursive procedure: a procedure that may be reactivated while still active in the same task.

reentrant procedure: a procedure that may be reactivated while active in another task.

REFER expression: the expression preceding the keyword REFER, from which an original bound, length, or size is taken when a based variable containing a REFER option is allocated, either by an ALLOCATE or LOCATE statement.

REFER object: the unsubscripted element variable appearing in a REFER option that specifies a current bound, length, or size for a member of a based structure. It must be a member of the structure, and it must precede the member declared with the REFER option.

reference: the appearance of a name,

except in a context that causes explicit declaration.

remote format item: the letter R specified in a format list together with the label of a separate FORMAT statement.

repetition factor: a parenthesized unsigned decimal integer constant that specifies:

1. The number of occurrences of a string configuration that make up a string constant.
2. The number of occurrences of a picture specification character in a picture specification.

repetitive specification: an element of a data list that specifies controlled iteration to transmit one or more data items, generally used in conjunction with arrays.

returned value: the value returned by a function procedure to the point of invocation.

scalar item: a single item of data; an element.

scalar variable: a variable that can represent only a single data item; an element variable.

scale: a system of mathematical notation: fixed-point or floating-point scale of an arithmetic value.

scale factor: a specification of the number of fractional digits in a fixed-point number.

scope (of a condition prefix): the portion of a program throughout which a particular condition prefix applies.

scope (of a declaration): the portion of a program throughout which a particular declaration is a source of attributes for a particular name.

scope (of a name): the portion of a program throughout which the meaning of a particular name does not change.

secondary entry point: an entry point identified by any of the names in the label list of an ENTRY statement.

select-group: a sequence of selection clauses headed by a SELECT statement and closed by its corresponding END statement, used for control purposes.

selection clause: A WHEN or OTHERWISE clause of a select-group.

self-defining data: a data item, or an aggregate of data items, that includes descriptive information about attributes of the data, such as values for adjustable bounds or lengths.

separator: see delimiter.

sign and currency symbol characters: the picture specification characters, S, +, -, and \$. These can be used

1. As static characters in which case they are specified only once in a picture specification and appear in the associated data item in the position in which they have been specified.
2. As drifting characters, in which case they are specified more than once (as a string in a picture specification) but appear in the associated data item at most once, immediately to the left of the significant portion of the data item.

significant allocation: any unfreed allocation in an area and any freed allocation that lies between the start of the area and the end of the unfreed allocation that is farthest from the start of the area. If a subsequent allocation of the same size is made in the same location the original allocation ceases to be significant.

simple parameter: a parameter for which no storage-class attribute is specified; it may represent an argument of any storage class, but only the current generation of a controlled argument.

source key: a key referred to in a record-oriented transmission statement that identifies a particular record within a direct-access data set.

source program: the program that serves as input to the compiler. The source program may contain preprocessor statements.

source variable: a variable whose value is to be assigned or to take part in some other operation.

standard default: the alternative attribute or option assumed when none has been specified and there is no applicable DEFAULT statement.

standard file: a file assumed by the processor in the absence of a FILE or STRING option in a GET or PUT statement; SYSIN is the standard input file and SYSPRINT is the standard output file.

standard system action: action specified

by the language to be taken in the absence of an on-unit for an on-condition.

statement: a basic element of a PL/I program that is used to delimit a portion of the program, to describe names used in the program, or to specify action to be taken. A statement can consist of a condition list, a label list, a statement identifier, and a statement body that is terminated by a semicolon.

statement body: that part of a statement that follows the statement identifier, if any, and is terminated by the semicolon; it includes the statement options.

statement identifier: the PL/I keyword that indicates the purpose of the statement.

statement-label constant: see label constant.

statement-label expression: see label expression.

statement-label variable: see label variable.

static storage allocation: the allocation of storage for static variables.

static variable: a variable that is allocated before execution of the program begins and that remains allocated for the duration of execution of the program.

stream: see data stream.

string: a connected sequence of characters or bits that is treated as a single data item.

string variable: a variable declared with the BIT or CHARACTER attribute, whose values can be either bit strings or character strings.

structure: a hierarchical set of names that refers to an aggregate of data items that may have different attributes.

structure expression: an expression whose evaluation yields a structure set of values.

structure of arrays: a structure containing arrays specified by declaring individual members names with the dimension attribute.

structure member: any of the minor structures or elementary names in a structure.

structuring: the makeup of a structure, in terms of the number of members, the order

in which they appear, their attributes, and their logical level (but not necessarily their names or declared level numbers).

subfield (of a picture specification): that portion of a picture specification field that appears before or after a V picture specification character.

subroutine: a procedure that is invoked by a CALL statement or CALL option. A subroutine cannot return a value to the invoking block, but it can alter the value of variables.

subscript: an element expression that specifies a position within a dimension of an array. A subscript can also be an asterisk, in which case it specifies the entire extent of the dimension.

subscript list: a parenthesized list of one or more subscripts, one for each dimension of an array, which together uniquely identify either a single element or cross section of the array.

subtask: a task that is attached by the given task or any of the tasks in a direct line from the given task to the last attached task.

synchronous: using a single flow of control for serial execution of a program.

target variable: a variable to which a value is assigned.

task: the execution of one or more procedures by a single flow of control.

task name: an identifier used to refer to a task variable.

task variable: a variable with the TASK attribute whose value gives the relative priority of a task.

termination (of a block): cessation of execution of a block, and the return of control to the activating block by means of a RETURN or END statement, or the transfer of control to the activating block or to some other active block by means of a GO TO statement.

termination (of a task): cessation of the flow of control for a task.

truncation: the removal of one or more digits, characters, or bits from one end of an item of data when a string length or precision of a target variable has been exceeded.

upper bound: the upper limit of an array dimension.

variable: a named entity that is used to refer to data and to which values can be assigned. Its attributes remain constant, but it can refer to different values at different times. Variables fall into three categories, applicable to any data type: element, array, and structure. Variables may be subscripted and/or qualified, or locator qualified.

virtual point picture character: the picture specification character, V, which is used in picture specifications to indicate the position of an assumed decimal or binary point.

zero-suppression characters: the picture specification characters Z, Y, and *, which are used to suppress zeros in the corresponding digit positions.