

ภาคผนวก

ภาคผนวก ก. error message

error ที่อาจเกิดขึ้นนั้น คอมไพเลอร์จะพิมพ์ข้อความ (message) ออกมาซึ่งแต่ละข้อความ จะมีความหมายดังที่อธิบายไว้ในแต่ละข้อความดังนี้คือ

Messages

- COULD NOT OPEN INPUT FILE
The RPG program designated to the compiler by the source filespec could not be found. Verify the command format and the location of the program to be compiled.
- INPUT SOURCE FILE MUST BE SPECIFIED
A **filespec** designating the source program to be compiled was omitted for the command string used to **invoke** the compiler. Reenter the command specifying the program to be compiled.
- COULD NOT OPEN PRINT FILE
The compiler could not open a file to be used for the program listing. Verify print filespec format in command (if specified) and the amount of free disk space.
- ILLEGAL COPY NAME FORMAT
The file name starting in column 12 of the '/COPY' command and ending with the first blank column could not be opened for input. Verify the **filespec** format and locations of the **file** to be copied.
- RECORD CODE IN COL. 6 IS NOT VALID
The value contained in column 6 of the current record is not a defined RPG record code and the record is not a part of a compile time table or array.
- COULD NOT OPEN OBJECT WORK FILE
The compiler could not open the work file necessary for the building of the object module. Verify the amount of the disk space.

- INVALID SEQUENCE INPUT
The record codes in column 6 of the source program do not follow the defined sequence for RPG programs. (e.g. 'F' before 'I' etc.)
- INVALID PARAMETER IN COMMAND STRING
An undefined entry was included in the command string used to invoke the compiler. Correct the command string and reenter.
- COL. 10 HAS INVALID OBJECT OUTPUT SPEC.
Column 10 of heading must contain either a blank or 'D' if an object module is being generated.
- COL. 11 HAS INVALID LISTING OPTION
If a listing is being generated, column 11 must contain a blank, 'B', 'P', 'L', 'E', or 'A'. This check is for syntax only. The standard listing format is always produced if a listing is selected.
- COL. 15 HAS INVALID DEBUG OPTION
Column 15 must contain a blank or 'I'.
- COL. 19 HAS INVALID DATE FORMAT SPEC.
Column 19 must contain a blank, 'M', 'D', or 'Y'.
- COL. 21 HAS INVALID INVERTED PRINT SPEC.
Column 21 must contain a blank, 'I', 'J', or 'D'.
- COL. 25 HAS INVALID PRINT WIDTH SPEC.
Column 25 must contain a blank or 'S'. This edit is for syntax only. The program listing is always formatted in the standard format.
- COL. 26 HAS INVALID COLLATING SEQUENCE SPEC.
Column 26 must contain a blank, 'E', or 'S'.
- COL. 41 HAS INVALID FORMS POSITIONING SPEC.
Column 41 must contain a blank or 'I'.
- INVALID CHAR. IN FILE NAME (COL. 7 – 14)
File name must be composed of alphabetic and numeric characters.
File name must start with an alphabetic character and not contain internal blanks.
- FILE NAME NOT UNIQUE (COL. 7 – 14)
All file names must be unique.
- INVALID FILE TYPE (COL. 15)
Column 15 must contain 'I', 'O', 'U', 'D', or 'C'.

- INVALID FILE DESIGNATION (COL. 16).
Column 16 must contain a blank, “P”, “S”, “R”, “C”, “D”, or “T”.
- INVALID EOF (COL. 17)
Column 17 must contain a blank or “E”.
- INVALID SEQUENCE (COL. 18)
Column 18 must contain a blank, “A”, or “D”.
- INVALID FILE FORMAT (COL. 19)
Column.19 must contain a blank, “F”, or “V”. Blanks will default to fixed length records.
- INVALID RECORD SIZE (COL. 24 – 27)
Record size must be between 1 and 9999. A blank record size for terminals or printer will default to 140.
- INVALID BLOCK SIZE (COL. 20-23)
Block size must be blank or an even multiple of the record size. If blank block size is assumed to be the same as the record size.
- INVALID MODE OF PROCESSING (COL. 28)
Column 28 must be blank, “L”, or “R”.
- INVALID KEY SIZE (COL. 29 – 30)
Key size must be blank or from 1 to 99. Key size cannot be blank for indexed or record address files.
- KEY SIZE NOT VALID FOR FILE (COL. 29 – 30)
Key size should only be given for indexed or record address files.
- INVALID RECORD ADDRESS TYPE (COL. 31)
Column 31 should be blank, “A”, “I”, “P”, or “K” (for UNIVAC compatibility).
- INVALID FILE ORGANIZATION (COL. 32)
Column 32 must be blank, “I”, “T”, or “1” through “9”.
- INVALID OVERFLOW INDICATOR (COL. 33 – 34)
Columns 33 – 34 must be blank or contain OA – OG or OV.
- KEY STARTING LOC. NOT NUMERIC ~ (COL. 35 – 38)
Key starting column must be specified for indexed files and be a numeric value.
- INVALID KEY STARTING LOCATION (COL. 35 – 38)
Key starting column plus key length must define a key contained within the given record size.

— INVALID EXTENSION CODE (COL. 39)

Column 39 must be blank, "E", or "L".

— INVALID DEVICE (COL. 40 – 46)

Valid devices are :

DISK	READ40
D I S C	PRINTR
DISK40	PRINTER
DKDISK	TTY
DPDISK	CONSOLE
DBDISK	CRT
DMDISK	KEYBORD
DECTAP	WORKSTN
TAPE	SPECIAL
READER	

These variations are necessary for compatibility with DEC, IBM, and UNIVAC.

— INVALID DEVICE UNIT NUMBER (COL. 46)

For DEC compatibility unit numbers may be blank or from 01 to 77.

— INVALID SYMBOLIC DEVICE (COL. 47 – 49)

Columns 47 – 49 may be blank or contain a symbolic device name for DEC compatibility. If given, the name must begin with an alpha character and contain only alpha and numeric characters.

— INVALID TAPE LABEL PROCESSING (COL. 53)

Column 53 must be blank or "S".

— INVALID FILE ADDITION CODE (COL. 66)

Column 66 must be blank, "A", or "U".

— INVALID INDEX EXPANSION FACTOR (COL. 67)

Column 67 must be blank or 0 -4. This edit is for syntax only.

— INVALID EXTERNAL INDICATOR (COL. 71 – 72)

Columns 71 – 72 must be blank or U 1 – U 8.

— INVALID TAPE REWIND CODE (COL. 70)

Column 70 must be blank, "U", "R", "N", "K", "L", or "M".

— INVALID FILE SHARING CODE (COL. 73)

Column 73 must be blank or "S" for shared.

— **INVALID CONTINUATION KEYWORD (COL. 54 - 59)**

Keyword given in continuation of "F" spec is invalid. Valid words are "NUM", "IND", "SLN", "FMTS", "ID", "INFDS", and "INFSR".

— **INVALID NAME (COL. 60 - 65)**

Invalid characters in field name following Keyword in continuation line.

— **CONTINUATION LINE CANNOT BE FIRST**

Continuation line not preceded by file spec.

— **MORE THAN 98 FILES SPECIFIED - FILE DELETED**

A maximum limit of 98 files in one program has been exceeded.

— **INVALID FILE TYPE, DESIG. (COL. 15, 16)**

The pairing of entries in column 15 (file type) and column 16 (file designation) is invalid.

— **INVALID COMBINATION IN COL. 16, 28, 31, 32**

The combination of entries given in the given columns must match the chart below :

FILE DESIGNATION	FILE ORGANIZATION	POSSIBLE ACCESS MODES	ALLOWABLE ENTRIES			
			column : 16	28	31	32
PRIMARY SECONDARY DEMAND	SEQUENTIAL or DIRECT	CONSECUTIVE	P	*	*	#
"	"	"	S	*	*	#
"	"	"	D	*	*	*
"	"	BY ADDRROUT FILE	P	R	I	#
"	"	"	S	R	I	#
"	INDEXED	"	P	R	I	I'
"	"	"	S	R	I	I
"	"	SEQUENTIAL BY KEY	P	*	A/P	I
"	"	"	S	*	A/P	I
"	"	"	D	*	A/P	I
"	"	SEQUENTIAL WITHIN LIMITS	P	L	A/P	I
"	"	"	S	L	A/P	I
"	"	"	D	L	A/P	I

FILE DESIGNATION	FILE ORGANIZATION	OR	POSSIBLE ACCESS MODES	ALLOWABLE ENTRIES			
				column :	16	28	31
RECORD ADDRESS	SEQUENTIAL		CONSECUTIVE (RECORD KEY LIMITS)	R	*	*	*
”	”		CONSECUTIVE (ADDROUT)	R	*	I	T
CHAINED INPUT	”		RANDOM, BY RELATIVE RECORD NUMBER	C	R	*	*
”	INDEXED		RANDOM, BY KEY	C	R	A/P	I

* = BLANK

= BLANK or 1 through 9

— INVALID FILE TYPE FOR ADDITIONS

— INPUT SPEC REQUIRED FOR FILE XXXXXX

This file has a file **spec** requiring input but no input **spec** was provided.

— OUTPUT SPEC REQUIRED FOR THE FILE XXXXXX

This file has a file **spec** requiring output but no output **spec** was provided.

— INDICATORS USED BUT NOT DEFINED

— INVALID KEY OF REFERENCE

Columns 68 – 69 of the file specification must be blank or zero for accessing an indexed file by the primary key or 01 – 99 to specify the number of the alternate key to be used.

— NO FILES DEFINED

At least one file **spec** must be given for a program.

— FILE NOT DEFINED (COL. 11 ~ 18)

File named is not defined in a file **spec**.

— FILE REFERENCED INVALID (COL. 11 – 18)

File must be defined as table in file **spec** to have extension specifications.

— REC. ADDR. CANNOT LINK TO THIS FILE

Record address/file cannot link to another record address file.

— INVALID FILE NAME (COL. 19– 26)

Named file not defined in a file **spec**.

— FILE NAME NOT DEFINED (COL. 19– 26)

Named file not defined in a file **spec**.

- FILE REFERENCED IN COL. 19-26 NOT TABLE FILE
File must be defined as a table file in the file `spec`.
- TABLE NAME MISSING (COL. 27 – 32)
Table name must be supplied.
- TABLE NAME NOT UNIQUE (COL. 27 – 32)
Another table is-defined with the same name.,
- ALTERNATE TABLE NAME NOT UNIQUE (COL. 46 – 52)
Another table exists with the same name.
- INVALID NUMBER ENTRIES PER RECORD (COL. 33 – 35)
Entries per record must be numeric.
- INVALID ENTRIES PER TABLE (COL. 36 – 39)
Entries per table must be numeric.
- INVALID NUMBER DECIMALS (COL. 44)
Column 44 must be blank or 0 – 9.
- INVALID ALTERNATING NUMBER DECIMALS (COL. 56)
Column 56 must be blank or 0 – 9.
- INVALID FORMAT CODE (COL. 43)
Column 43 must be blank, “N”, “P”, or “B”.
- INVALID ALTERNATING FORMAT CODE (COL. 55)
Column 55 must be blank, “N”, “P”, or “B”.
- INVALID ENTRY LENGTH (COL. 40 – 42)
Length of ehtry must be numeric.
- INVALID ALTERNATING ENTRY LENGTH (COL. 52 – 54)
Length of entry must be numeric.
- INVALID SEQUENCE CODE (COL. 45)
Column 45 must be blank, “A”, or “D”.
- INVALID ALTERNATING SEQUENCE CODE (COL. 57)
Column 57 must be blank, “A”, or “D”.
- MORE THAN 97 TABLES DEFINED / TABLE DELETED
A maximum limit of 97 tables in one program has been exceeded.
- TABLE NAME IS INVALID
Invalid characters in table name.

- ALTERNATE TABLE NAME IS INVALID
Invalid characters in table name.
- INVALID FILE NAME (COL. 18 - 19)
File name not defined.
- INVALID ENTRY IN COL. 18 - 19 (FORM LENGTH)
Columns 18 and 19 must contain "FL".
- INVALID OVERFLOW LINE (COL. 20 - 22)
Overflow line must be numeric.
- INVALID LINES PER PAGE DURING OVERFLOW EDIT
Overflow line must be numeric.
- OVERFLOW LINE GREATER THAN LINES PER PAGE
Overflow line cannot exceed lines per page.
- LINE SPEC. VALID ONLY FOR PRINTER FILES
Device type of file referenced is not a printer.
- INVALID LINES PER PAGE (COL. 15 - 17)
Lines per page cannot exceed 112.
- INVALID ENTRY IN COL. 23 - 24 (OVERFLOW LINE)
Columns 23 - 24 must contain "OL".
- FILE MUST BE REFERENCED BEFORE DEFINING FIELDS
First input **spec** must be a file definition.
- NO FILES DEFINED- INPUT NOT PERMITTED
No files were defined, therefore, input specifications are illegal.
- FILE NAME NOT DEFINED (COL. 7 - 14)
File name is not defined in a file specification.
- INPUT SPEC. VALID ONLY FOR INPUT OR UPDATE FILE
- INPUT SPEC. NOT VALID FOR TABLE FILE
- ALPHA SEQ. CODE - COL. 17 SHOULD BE BLANK
- ALPHA SEQ. CODE - COL. 28 SHOULD BE BLANK
- INVALID SEQUENCE CODE (COL. 15 - 16)
Columns 15 - 16 are not numeric.

- COL. 17 MUST BE ‘1’ OR ‘N’
If a numeric sequence is given in 15 – 16, column 17 must contain a “1” or “N”.
- COL. 18 MUST BE BLANK OR ‘0’
If column 17 is “1” or “N”, column 18 must be blank or “0”.
- INVALID RECORD INDICATOR (COL. 19 – 20)
Columns 19 – 20 must be blank, “***” for look-ahead, or contain a valid indicator (01 – 99, L 1 – L 9, LR, H 1 -H 9) for record definitions.
- INVALID RECORD POSITION
Record position value must be blank or numeric. If numeric value, should define a position less than or equal to the record size defined in the file specification.
- MISSING RECORD POSITION
If record position is omitted, identification must be omitted.
- INVALID ENTRY FOLLOWING RECORD POSITION
Record position must be followed by blank or “N”.
- INVALID C/Z/D ENTRY
- COL. 14– 16 NOT ‘AND’ OR ‘OR’
- COL. 17 – 20 SHOULD BE BLANK FOR CONTINUATION LINE
- COL. 43 NOT BLANK, ‘P’, OR ‘B’
Field format code is invalid.
- INVALID FIELD START (COL. 44 – 47)
Field starting column is not numeric, zero, or greater than the record size defined in the file specification.
- INVALID FIELD END (COL. 48 – 51)
Field ending column is not numeric, zero, or a value greater than the record size defined in the file specification.
- FIELD TOO LONG
Field length exceeds 256 characters for alphanumeric or 15 for numeric, 8 for packed or 4 for binary.
- INVALID DECIMAL POSITIONS
Decimal positions must be blank or 0 – 9 or is greater than field length.
- DUPLICATE FIELD NAME IN RECORD
Field name has already been defined in record.

- DEFN. OF FIELD DOES NOT MATCH PREVIOUS DEFN.
Field previously defined in another record, but with a different length and/or format.
- FIELD NAME ILLEGAL
Invalid characters used in field name.
- INVALID CONTROL LEVEL (COL. 59 – 60)
Control level not blank or L 1 – L 9.
- INVALID FILE TYPE FOR CONTROL LEVEL
Control level given for file other than input or update primary, secondary, or record address files.
- CONTROL LEVEL CANNOT BE BINARY FIELD
- INVALID MATCHING FIELD (COL. 61– 62)
Matching field not blank or M 1 – M 9.
- INVALID FILE TYPE FOR MATCHING FIELD
Matching field can only be specified for input or update primary, secondary, or record address files.
- INVALID FIELD / RECORD- ENTRY (COL. 63 – 64)
Columns 63 – 64 not blank or a valid record indicator.
- INVALID PLUS INDICATOR (COL. 65 – 66)
- INVALID MINUS INDICATOR (COL. 67 – 67)
- INVALID ZERO / BLANK INDICATOR (COL. 69-70)
- LOOK-AHEAD SEQUENCE MUST BE ALPHA
- COL. 21-43 MUST BE BLANK FOR LOOK-AHEAD
- COL. 59 70 MUST BE BLANK FOR LOOK-AHEAD
- D.S. NAME CANNOT MATCH FILE NAME
- ILLEGAL CHAR IN D.S. NAME
- COL. 18 INVALID FOR D.S.
- ILLEGAL D.S. FIELD NAME
Illegal character contained in columns 53 – 58.
- DUPLICATE D.S. FIELD NAME
Field name already defined.

- ARRAY SIZE MUST MATCH DEFINITION
Array size from extension specifications does not match length of input array.
- INVALID CONTROL LEVEL (COL. 7-8)
Columns 7-8 must be blank, "AN", "OR", "SR", L 1 - L 9, or "LR 9".
- INVALID VALUE IN COL. 9
Column 9 should be blank or "N".
- INVALID VALUE IN COL. 12
Column 12 should be blank or "N".
- INVALID VALUE IN COL. 15
Column 15 should be blank or "N".
- INVALID INDICATOR IN COL. 10-11
Columns 10-11 should be blank or a valid indicator.
- INVALID INDICATOR IN COL. 13-14
Columns 13-14 should be blank or a valid indicator.
- INVALID INDICATOR IN COL. 16-17
Columns 16-17 should be blank or a valid indicator.
- INVALID OPERATION CODE IN COL. 28-32
Operation code is not defined.
- RESULT DOES NOT MATCH PREV DEFN
The definition of the field being defined does not match the previous definition of the same field.
- RESULT FIELD INVALID (COL. 43-48)
Result field name contains invalid characters.
- INVALID INDICATOR (COL. 54-55)
Columns 54-55 should be blank or a valid indicator.
- INVALID INDICATOR (COL. 56-57)
Columns 56-57 should be blank or a valid indicator.
- INVALID INDICATOR (COL. 58-59)
Columns 58-59 should be blank or a valid indicator.
- INVALID HALF-ADJUST OPTION (COL. 53)
Column 53 should be blank or "H".

- FACTOR 1 SHOULD BE BLANK (COL. 18-27)
This operation code requires Factor 1 to be blank.
- FACTOR 2 SHOULD BE BLANK (COL. 33 -42)
This operation code requires Factor 2 to be blank.
- RESULT FIELD SHOULD BE BLANK (COL. 43 -48)
This operation code requires the result field to be blank.
- RESULTING INDICATORS MUST BE PRESENT
This operation code requires resulting indicators.
- NAME PREVIOUSLY DEFINED
Label was previously used to with a TAG or BEGSR.
- INVALID LABEL FORMAT
Label must begin with an alpha and not exceed 6 characters.
- ENDSR MUST BE PRECEDED BY BEGSR
- INDICATORS MUST BE BLANK (COL. 9– 17)
This operation code requires columns 9– 17 to be blank.
- INVALID FILE
File name was not defined in a file specification.
- FACTOR 1 OR RESULT MUST HAVE ENTRY
- ILLEGAL VALUE IN MASK (COL. 33 – 42)
Mask may contain values of 0- 7.
- FACTOR 2 NOT ARRAY OR TABLE
- FACTOR 2 AND RESULT MUST BE TABLES
- TABLES CANNOT HAVE SUBSCRIPTS
- MUST HAVE AT LEAST ONE INDICATOR
This operation code requires at least one resulting indicator to be specified.
- FACTOR 1 INVALID
Factor 1 must be blank, a field name, or a literal.
- FACTOR 2 INVALID
Factor 2 must be an array name with no index or subscript.
- DIV MUST PRECEED MVR
- COL. 7 THROUGH 27 MUST BE BLANK

- COL. 53 THROUGH 59 MUST BE BLANK
- INDICATORS MUST BE PRESENT
- INDICATORS NOT ALLOWED
- INVALID NUMBER DECIMALS
Decimal field is not blank or 0 = 9 or is greater than field length.
- FIELD XXXXXX IS UNDERINED IN LINE NUMBER NNNN
The field named in the given line number was never defined.
- ARRAY XXXXXX EXCEEDED BY EXPLICIT INDEX IN LINE NNNN
The index used references an item outside the defined array.
- INDEX XXXXXX IS NOT NUMERIC IN LINE NNNN
The field used as an index in the given line is not defined as numeric.
- FIELD XXXXXX NOT NUMERIC IN LINE NNNN
An operation code requiring a numeric field was used with a non-numeric field.
- BOTH FIELDS MUST BE NUMERIC
The operation code used does not allow mixed classes of fields.
- TAG XXXXXX IS NOT DEFINED – LINE NNNN
A GOTO references a label that was never defined.
- TAG XXXXXX INVALID DESTINATION FOR LINE NNNN
GOTO's may not branch from detail to total, total to detail, total to LR, into subroutines, out of subroutines, or from one subroutine to another.
- FIELD XXXXXX LENGTH DOES NOT MATCH KEY SIZE – LINE NNNN
The size of a field used to pass the key value to a CHAIN operation must agree with the size of the key as defined in the file specification.
- INVALID DATA IN COL. 14– 16
Column 1.5 may be blank, “H”, “D”, “T”, or “E”, if not columns 14– 16 must contain “AND” and “OR”.
- 2. — INVALID DATA IN COL. 23
Column 23 must be blank or “N”.
- INVALID DATA IN COL. 26
Column 26 must be blank or “N”.
- INVALID DATA IN COL. 29
Column 29 must be blank or “N”.

- INVALID INDICATOR IN COL. 24 – 25
- INVALID INDICATOR IN COL. 27 – 28
- INVALID INDICATOR IN COL. 30 – 31
- NO WORK SPACE AVAILABLE – ITEM DELETED
Dynamic work space has been exhausted. Inform System Manager to reinstall compiled with increased space.
- NO FILES WERE DEFINED
Output specifications given and no files defined in file specifications.
- FILE NAME NOT DEFINED.
The file named was not defined in the file specifications.
- FILE NOT DEFINED AS OUTPUT OR UPDATE
Output specifications must be for output capable files.
- INVALID LINE TYPE (COL. 15)
Column 15 must be “H”, “D”, “T”, or “E” for file/record output specifications.
- INVALID SKIP BEFORE (COL. 19-20)
Columns 19-20 must be blank, 01-99, A 0-A 9, or B 0-B 9.
- FIELD NOT DEFINED (COL. 32 – 37)
- INVALID EDIT CODE (COL. 38)
- INVALID DATA FORMAT (COL. 44)
Column 44 must be blank; “P”, or “B”.
- INVALID BLANK AFTER (COL. 39)
Column 39 must be blank or “B”.
- INVALID EDIT WORD (COL. 45 – 70)
- INVALID FIELD ENDING POSITION (COL. 40 – 43)
Field ending position is not within the record size as defined in the file specification.
- INVALID LITERAL DEFINITION (COL. 45 – 70)
- INVALID SKIP AFTER (COL. 21 – 22)
Columns 21 – 22 must be blank, 01 – 99, A 0 - A 9, or B 0 – B 9.
- INVALID DATA IN COL. 16 – 18
Columns 16 – 18 not “ADD”, “DEL”, fetch overflow, or line spacing.

- MUST BE PRECEDED BY FILE ENTRY
File entry must precede AND/OR entry.
- MUST BE PRECEDED BY FILE ENTRY
File entry must precede field entry.
- CANNOT SUBSCRIPT A FIELD
- SUBSCRIPT FIELD NOT DEFINED OR ILLEGAL
- CANNOT EDIT ALPHA FIELDS
Edit code or edit mask cannot be specified for alpha fields.
- EDIT WORK LENGTH DOES NOT MATCH FIELD LENGTH
- XXXXXX REFERENCED BY GOT0 BUT NOT DEFINED
- XXXXXX REFERENCED BY EXSR BUT NOT DEFINED.
- XXXXXX USED IN RLABEL BUT NOT DEFINED.
- NO TABLES DEFINED
Compile time table data entered but no compile time tables were defined in extension specifications.
- INVALID FORMAT FOR COMPILE TIME TABLE
Compile time table data entered for compile time table whose format code is not "A" or "N".
- NO SPACE AVAILABLE IN TABLE
More compile time data entered than space was defined in the table.
- INVALID FILE TRANSLATE ENTRY
File translate entry must have file name.
- NON-NUMERIC DATA IN NUMERIC TABLE
A table defined with a numeric format code is being loaded with non-numeric data.