Appendix A

Run−Time Error Messages

Table A−1lists possible Fortran run−time I/O errors. Other errors given by the operating system may also occur.

Each error is listed on the screen alone or with one of the following phrases appended to it:

apparent state: unit *num* named *user filename*

last format: *string*

lately (reading, writing)(sequential, direct, indexed)

formatted, unformatted(external, internal) IO

When the Fortran run−time system detects an error, the following actions take place:

- A message describing the error is written to the standard error unit (Unit 0).
- A core file, which can be used with *dbx* (the debugger) to inspect the state of the program at termination, is produced if the **f77_dump_flag** environment variable is defined and set to **y**.

When a run−time error occurs, the program terminates with one of the error messages shown inTable A−1 All of the errors in the table are output in the format *user filename* : *message.*

Table A−1 Run−Time Error Messages

Number	Message/Cause
100	`error in format` Illegal characters are encountered in FORMAT statement.
101	`out of space for I/O unit table` Out of virtual space that can be allocated for the I/O unit table.
102	`formatted io not allowed` Cannot do formatted I/O on logical units opened for unformatted I/O.
103	`unformatted io not allowed` Cannot do unformatted I/O on logical units opened for formatted I/O.
104	`direct io not allowed` Cannot do direct I/O on sequential file.
106	`can’t backspace file` Cannot perform BACKSPACE/REWIND on file.
107	`null file name` Filename specification in OPEN statement is null.
109	`unit not connected` The specified filename has already been opened as a different logical unit.
110	`off end of record` Attempt to do I/O beyond the end of the record.
112	`incomprehensible list input` Input data for list−directed read contains invalid character for its data type.
113	`out of free space` Cannot allocate virtual memory space on the system.

114 `unit not connected`
Attempt to do I/O on unit that has not been opened and cannot be opened.

115 `read unexpected character`
Unexpected character encountered in formatted or directed read.

116 `blank logical input field`
Invalid character encountered for logical value.

117 `bad variable type`
Specified type for the namelist is invalid. This error is most likely caused by incompatible versions of the front end and the run−time I/O library.

118 `bad namelist name`
The specified namelist name cannot be found in the input data file.

119 `variable not in namelist`
The namelist variable name in the input data file does not belong to the specified namelist.

120 `no end record`
$END is not found at the end of the namelist input data file.

121 `namelist subscript out of range`
The array subscript of the character substring value in the input data file exceeds the range for that array or character string.

122 `negative repeat count`
The repeat count in the input data file is less than or equal to zero.

123 `illegal operation for unit`
You cannot set your own buffer on direct unformatted files.

124 `off beginning of record`
Format edit descriptor causes positioning to go off the beginning of the record.

125 `no * after repeat count`
An asterisk (*) is expected after an integer repeat count.

126 `’new’ file exists`
The file is opened as new but already exists.

127 `can’t find ’old’ file`
The file is opened as old but does not exist.

130 `illegal argument`
Invalid value in the I/O control list.

131 `duplicate key value on write`
Cannot write a key that already exists.

132 `indexed file not open`
Cannot perform indexed I/O on an unopened file.

133 `bad isam argument`
The indexed I/O library function receives a bad argument because of a corrupted index file or bad run−time I/O libraries.

134 `bad key description`
The key description is invalid.

135 `too many open indexed files`
Cannot have more than 32 open indexed files.

136 `corrupted isam file`
The indexed file format is not recognizable. This error is usually caused by a corrupted file.

137 `isam file not opened for exclusive access`

Cannot obtain lock on the indexed file.

138 `record locked`
The record has already been locked by another process.

138 `key already exists`
The key specification in the OPEN statement has already been specified.

140 `cannot delete primary key`
DELETE cannot be executed on a primary key.

141 `beginning or end of file reached`
The index for the specified key points beyond the length of the indexed data file. This error is probably because of corrupted ISAM files or a bad indexed I/O run−time library.

142 `cannot find request record`
The requested key for indexed READ does not exist.

143 `current record not defined`
Cannot execute REWRITE, UNLOCK, or DELETE before doing a READ to define the current record.

144 `isam file is exclusively locked`
The indexed file has been exclusively locked by another process.

145 `filename too long`
The indexed filename exceeds 128 characters.

148 `key structure does not match file structure`
Mismatch between the key specifications in the OPEN statement and the indexed file.

149 `direct access on an indexed file not allowed`
Cannot have direct−access I/O on an indexed file.

150 `keyed access on a sequential file not allowed`
Cannot specify keyed access together with sequential organization.

151 `keyed access on a relative file not allowed`
Cannot specify keyed access together with relative organization.

152 `append access on an indexed file not allowed`
Cannot specifiy append access together with indexed organization.

153 `must specify record length`
A record length specification is required when opening a direct or keyed access file.

154 `key field value type does not match key type`
The type of the given key value does not match the type specified in the OPEN statement for that key.

155 `character key field value length too long`
The length of the character key value exceeds the length specification for that key.

156 `fixed record on sequential file not allowed`
RECORDTYPE='fixed' cannot be used with a sequential file.

157 `variable records allowed only on unformatted sequential file`
RECORDTYPE='variable' can only be used with an unformatted sequential file.

158 `stream records allowed only on formatted sequential  file`
RECORDTYPE='stream_lf' can only be used with a formatted sequential

file.

159 `maximum number of records in direct access file exceeded`
The specified record is bigger than the MAXREC= value used in the OPEN statement.

160 `attempt to create or write to a read−only file`
User does not have write permission on the file.

161 `must specify key descriptions`
Must specify all the keys when opening an indexed file.

162 `carriage control not allowed for unformatted units`
CARRIAGECONTROL specifier can only be used on a formatted file.

163 `indexed files only`
Indexed I/O can only be done on logical units that have been opened for indexed (keyed) access.

164 `cannot use on indexed file`
Illegal I/O operation on an indexed (keyed) file.

165 `cannot use on indexed or append file`
Illegal I/O operation on an indexed (keyed) or append file.

167 `invalid code in format specification`
Unknown code is encountered in format specification.

168 `invalid record number in direct access file`
The specified record number is less than 1.

169 `cannot have endfile record on non−sequential file`
Cannot have an endfile on a direct− or keyed−access file.

170 `cannot position within current file`
Cannot perform fseek() on a file opened for sequential unformatted I/O.

171 `cannot have sequential records on direct access file`
Cannot do sequential formatted I/O on a file opened for direct access.

173 `cannot read from stdout`
Attempt to read from stdout.

174 `cannot write to stdin`
Attempt to write to stdin.

176 `illegal specifier`
The I/O control list contains an invalid value for one of the I/O specifiers. For example, ACCESS='INDEXED'.

180 `attempt to read from a writeonly file`
User does not have read permission on the file.

181 `direct unformatted io not allowed`
Direct unformatted file cannot be used with this I/O operation.

182 `cannot open a directory`
The name specified in FILE= mut be the name of a file, not a directory.

183 `subscript out of bounds`
The exit status returned when a program compiled with the -C option has an array subscript that is out of range.

184 `function not declared as varargs`
Variable argument routines called in subroutines that have not been declared in a $VARARGS directive.

185 `internal error`

Internal run−time library error.