

## ELLIOTT 900 SERIES SIMULATOR

### ALGOL ERROR MESSAGES.

#### Errors at translation time.

When an error is reported, the error number, the line number and the line of text are given, together with an upward pointing arrow to show where the error occurred. Translation continues and further errors may be given. An example follows:

```
ERROR NO      18
LINE NO       7
  W := 23;
    ^
```

meaning that the variable W has not been declared.

The line number starts at 1 for the title line and includes only lines with printable stuff on them.

Some errors are reported from the loader and consist of only two characters, e.g., FE means program is too large. These errors codes are listed at the end of this section.

1. read misplaced
2. print misplaced
3. Constant or expression in read list.
4. Wrong delimiter in switch declaration.
5. Illegal actual parameter.
6. Too many parameters to a procedure.
7. Illegal number.
8. Integer constant too big.
9. Two statements in the same block are prefixed by the same label.
10. Identifier or constant not as expected.
11. Letter, digit or subscript ten misused.
12. true or false follows an identifier or constant.
13. comment does not follow semicolon or begin.
14. An internal error.
15. Unrecognised basic symbol, e.g., caused by fred.
16. No assignment within a type procedure to procedure name.
17. Identifier in value or spec. part is not a formal parameter.
18. Use of undeclared identifier.
19. Illegal symbol.

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20. Non procedure identifier used as a statement.
21. "!=" omitted from for clause.
22. Illegal use of label name.
23. Inadmissible array declaration.
24. <switch name> not an actual parameter nor preceded by goto.
25. Non type procedure as function designator.
26. switch misplaced.
27. Declaration without identifier.
28. "!=" preceded by a constant or used inside an expression.
29. ":" in type or switch declaration misused.
30. Adjacent delimiters inadmissible.
31. Constant before "!=" or "[", or constant or string name in  
read list.
32. Item other than a non-type procedure used as a statement.
33. Identifier or constant follows a closing round or square bracket.
34. Relation on each side of a simple arithmetic expression.
35. Illegal statement, delimiter misused.
36. Declaration starts incorrectly.
37. Error between for and "!=".
38. Missing array or switch name, or "[" misplaced.
39. ";" misused in array declaration.
40. end misused.
41. Local identifier used in array bounds.
42. goto follows an identifier or constant.
43. Wrong for clause preceding do.
44. for misused.
45. Misused boolean constant.
46. Assignment to procedure identifier outside procedure body.
47. real, integer or boolean misplaced.
48. Identifier declared twice in same block head.
49. Blank parameter.
50. No begin at start of program.
51. Wrong number of subscripts or parameters.
52. "!=" appears in actual parameter list.
53. Statement ends incorrectly.
54. Declaration follows statement.
55. ":", goto or for used in expression.
56. Illegal parameter comment or ")" precedes identifier.
57. Wrong use of delimiter.
58. Relational or logical operator used as an arithmetic

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- operator.
- 59. Illegal use of logical operator.
  - 60. Omission or error precedes begin, or begin follows ":=".
  - 61. "(" misplaced or missing procedure name.
  - 62. Function designator as designational expression.
  - 63. Misplaced declarator.
  - 64. Subscripted variable as statement.
  - 65. Illegal specifier.
  - 66. Misused comma or colon in an expression.
  - 67. if misused or used in read or print list.
  - 68. if used in type declaration.
  - 69. Corresponding if has been omitted, or conditional expression without an else.
  - 70. Corresponding then missing.
  - 71. Illegal character in inner string, or missing close quotes.  
in previous string.
  - 72. array misplaced.
  - 73. "[" not preceded by an identifier.
  - 74. Unmatched "]"
  - 75. Upper bound missing in an array declaration.
  - 76. Illegal type declaration.
  - 77. Illegal array list.
  - 78. Corresponding for missing.
  - 79. A jump is made to a label declared, but not placed in the block that ends here.
  - 80. step, until or while misused in a for statement.
  - 81. Misused ")" other than in an expression.
  - 82. ")" misplaced or unmatched
  - 83. Program too complex, i.e., some statement is too complicated.
  - 84. Wrong delimiter after procedure statement.
  - 85. Program too large, i.e., it contains too many names, labels, constants or switches.
  - 86. Error before procedure.
  - 87. Repeated formal parameter.
  - 88. Wrong formal parameter delimiter.
  - 89. In a call of a formal procedure, one of its parameters is ln or exp.
  - 90. Wrong delimiter in value or specification part.
  - 91. Input buffer overflow, i.e., more than 120 characters in a line.

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- 92. Formal parameter has not appeared in the specification part.
- 93. Declaration terminated by end or containing begin.
- 94. A formal parameter which is a switch, string or procedure is called by value.
- 95. Switch designator has more than one subscript.
- 96. Wrong for clause.
- 97. then misused.
- 98. Illegal character or parity error. The character is replaced by the back-arrow character in the displayed line  
but "↑" is not printed beneath it
- 99. Current use of identifier inconsistent with previous uses.
- 100. Conditional expression needs parentheses.
- 101. Wrong delimiter after procedure identifier in procedure declaration.
- 102. No ";" between formal parameter part and value or specification part.
- 103. Commas or colons wrong in array bounds.
- 104. div used with a real argument.
- 105. Illegal parameter delimiter after a string.
- 106. Integer labels not allowed.
- 107. Recursive function calls not allowed (restriction removed in HUNTER ALGOL).
- 108. An actual parameter which is a procedure has one of its parameters called by value (restriction removed in HUNTER ALGOL).
- 109. Constant should not be used in procedure heading.
- 110. Wrong specification part.
- 111. Different number of parameters from previous use of formal procedure or wrong number of subscripts.
- 112. Mixed type in multiple assignment.

Warning messages.

Warning messages are produced by end followed by a comment containing a delimiter, for example:

\*WARNING

LINE NO 25

"END" X:=1;

And for identifiers that are declared but not used, as in:

\*WARNING

SUM

Load time errors.

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FA Misread or mispunched paper tape (i.e., checksum error).  
FC Two procedures (at least one of which is a library procedure) have the same name.  
FD As FA.  
FE Program too large to load.  
FF As FA.  
FG Attempt to load a global label in a code procedure at location 8151 or above (AJH Large Program system only)  
FU Missing library procedure.  
FZ Attempt to load a library or code procedure beyond address 8179 (Large Program system only).

### Errors at run time.

A run time error looks like this:

ERROR NO	ADR	RET
9	48	0

where ADR represents the place where the error occurred and RET is the place where the call to the current piece of code was.

1. Parameter mismatch
2. Space overflow, too much claim on store.
3. Integer overflow.
4. Jump error, i.e., switch subscript outside range.
5. Subscript error.
6. Illegal symbol inside inner string quotes.
7. Attempt to output non-standard floating-point number.
8. Illegal character or ' found when reading a number.
9. Real overflow.
10. Invalid argument to sin or cos.
11. Negative argument to sqrt.
12. Argument > 40 for exp.
13. Negative argument for ln.
14. Illegal character on data tape.
15. Parity error on data tape.
16. Input buffer overflow, i.e., longer than 120 characters.
17. Numeric character encountered before ' on instrin.
18. Illegal form of number, e.g. two decimal points.
19. A^B with A and B real and A<0.
20. Corrupt program, possibly due to error in a code

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- procedure.
21. Attempt to assign to formal parameter that is a constant.
  22. Range of array subscript bounds is negative.
  23. instring or outstring error.
  24. Attempt to jump to label in inner block.
  25. (Translator version incompatible with run-time system.)