

## CodeXplorer – Overview

CodeXplorer™ provides interactive descriptions of the statements and variables in a program. It also shows the relationship between the statements, variables, and input/output. Flow of control is visualized with arrows for decision structures, repetition, and function calls. Further, code can be copied from CodeXplorer to an IDE or AI tool.

**Code Example Help:** Click on the title of the code example (at top) to see an overall description of the program.

**Statement Help:** Click on a statement to see:

- a help box describing the statement
- variables used in the statement, highlighted in the variable section (at right), also noting:
  - > variable action is set in statement
  - <- variable action is accessed in statement
  - <-> variable is both accessed and set in statement
- if input (via keyboard) or output (to screen) is used in the statement, these are highlighted in the INPUT / OUTPUT section at lower right.

**Variable Help:** Click on a variable name (in the right section), to see:

- a help box describing the variable
- the statements where the variable is used, highlighted in the code

**Input / Output:** Click on an [display] or [keyboard], to see all statements involving input or output, highlighted in the code.

**Flow of Control Visualization:** For decision structures (if/elif/else), repetition (while, for), and function calls, program flow is indicated for the selected statement using arrows.

**Copy & Paste Code:** Click on the [Copy] button, to copy code to the system clipboard, for pasting into:

- an integrated development environment (IDE), to run the program
- an AI tool, to ask further questions about the program

**Syntax Highlighting** is used in the code to distinguish:

keywords

variables

numeric constants

string constants

function names

comments

**Line Numbers:** Click the [Line #s] button to show or hide line numbers for the program.