

# What is Compiled and What is Not

The Natural Optimizer Compiler is particularly effective for programs that contain a considerable amount of data manipulation, such as computation, transfer, and logical condition processing.

The Natural Optimizer Compiler compiles the following statements to machine code:

- assignment statements (ASSIGN and MOVE)
  - RESET
  - arithmetic statements (COMPUTE, ADD, SUBTRACT, MULTIPLY, DIVIDE)
  - conditional statements (IF, DECIDE)
  - control statements (FOR, REPEAT)
  - ESCAPE
  - COMPRESS
  - EXAMINE
    - with the following clauses only:  
GIVING NUMBER, GIVING POSITION or GIVING LENGTH (see also the Natural Statements documentation).
    - GIVING INDEX is not optimized.
- Example:
- ```
EXAMINE #TEXT FOR #A GIVING NUMBER #NMB1
EXAMINE #TEXT FOR #A GIVING POSITION #POSEX5
EXAMINE #TEXT FOR #A GIVING LENGTH #LGHEX6
```

The Natural Optimizer Compiler **does not** compile the following statements:

- I/O statements (DISPLAY, WRITE, READ/WRITE WORK FILE).
- complex special statements like SEPARATE.
- statements that pass control to another programming object like FETCH, PERFORM, CALLNAT, CALL.
- statements that perform database access (READ, FIND, HISTOGRAM, GET, UPDATE, DELETE, END TRANSACTION, BACKOUT TRANSACTION)

**Note:**

The options the Natural Optimizer Compiler provides cannot be used for specifying statements to be optimized as described in the Optimizer Options.