

**Assembler**

Converts \_\_\_\_\_  
\_\_\_\_\_ into machine code

**Interpreter**

Converts code one line at a time, \_\_\_\_\_

Positive= Errors are reporting and corrected as execution continues

Drawback= \_\_\_\_\_

**Compiler**

Converts high level programs into machine code for execution at a later time


( \_\_\_\_\_ )

Positive= \_\_\_\_\_

Drawback= Displays multiple \_\_\_\_\_

\_\_\_\_\_ that can be hard to understand

Error type	Description	Example
Logical error	A mistake in the program instructing the program to do the wrong thing The program works but _____	
	When the program _____ as a result of an invalid operation during execution	3.12554 becomes 3.12
		print("Hello"
Rounding error	When a compiler can't find the _____ as the programmer might have _____ it incorrectly in _____	When a library has not been included in the code but has been called

Compilation process	
Stage 1	Lexical analysis
Stage 2	
Stage 3	_____ analysis
Stage 4	_____ analysis
Stage 5	_____ generation Machine code is generated
Stage 6	Code _____

**Assembler**

Converts \_\_\_\_\_

\_\_\_\_\_

**Interpreter**

Converts code one line at a time, \_\_\_\_\_

\_\_\_\_\_

Positive= \_\_\_\_\_

Drawback= \_\_\_\_\_

**Compiler**

Converts \_\_\_\_\_


\_\_\_\_\_

Positive= \_\_\_\_\_

Drawback= Displays multiple \_\_\_\_\_

that can be hard to understand

Error type	Description	Example
Logical error	A mistake in the program instructing the program to do the wrong thing  The program works but _____	
	When the program _____ as a result of an invalid operation during execution	
		3.12554 becomes 3.12
		print("Hello"
Rounding error		
	When a compiler can't find the sub procedure as the programmer might have declared it incorrectly / did not instruct the compiler to include the sub program (library) in the code.	

Compilation process	
Stage 1	Lexical analysis
Stage 2	
Stage 3	_____ analysis
Stage 4	_____ analysis
Stage 5	_____ generation Machine code is generated
Stage 6	Code _____

Syntax errors are a type of programming error.

Giving specific examples, describe **two** other different types of programming errors.

[6]

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The following program is intended to calculate a total mark achieved by one student who has taken four tests. The program contains **two** errors. [4]

```
Total is integer  
Count is integer  
Mark is integer  
  
Total = 0  
  
for Count = 1 to 4  
    ipnut Mark  
    Total = Total - Mark  
next Count
```

Name the errors and write down the corrected code.

**Error type 1**

**Corrected code 1**

**Error type 2**

**Corrected code 2**

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