

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 _____

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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]

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