

Compiler

1) It scans the entire program first and translates it into machine code.

2) Debugging is slow

3) Execution ^{time} is less

4) Compiler is a language processor which converts high level language to low level language and vice-versa.

5) It is more efficient

6) Compilers are longer in size.

7) Intermediate Object code is generated.

8) Errors are displayed after entire program is checked.

9) Example: C Compiler, COBOL, C++.

10) Compiler does not allow a program to run until it is completely error free.

Interpreter

It scans line by line programs and convert into machine code.

Debugging is faster

Execution ^{time} is more

Interpreter is a language processor which converts high level language to low level language and vice-versa.

It is less efficient

Interpreters are smaller than compiler.

No intermediate object code is generated.

Errors are displayed for every instructions interpreted

Example: BASIC, Python, Ruby, PHP

Interpreter runs the program from first line and stops execution only if it encounters an error