

Lecture – 5

Comiler:

A compiler is a software program that follows the syntax rule of programming language to convert a source code to machine code. If any error is present in a program, it generates an error message, if your program is error free then it will generate machine code.

Interpreter:

An interpreter is also a software program that translates a source code into a machine language. However, an interpreter converts high-level programming language into machine language **line-by-line** while interpreting and running the program.

Difference between Compiler and Interpreter:

Compiler	Interpreter
1. A compiler translates complete high-level programming code into machine code at once.	An interpreter translates one statement of programming code at a time into machine code.
2. As the source code is already converted into machine code , the code execution time becomes short.	As the source code is interpreted line-by-line, error detection and correction become easy .
3. It stores the converted machine code from your source code program on the disk.	It never stores the machine code at all on the disk.

These are basic difference and main.