



FACULTY OF ENGINEERING & TECHNOLOGY

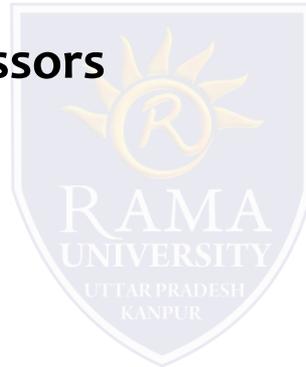
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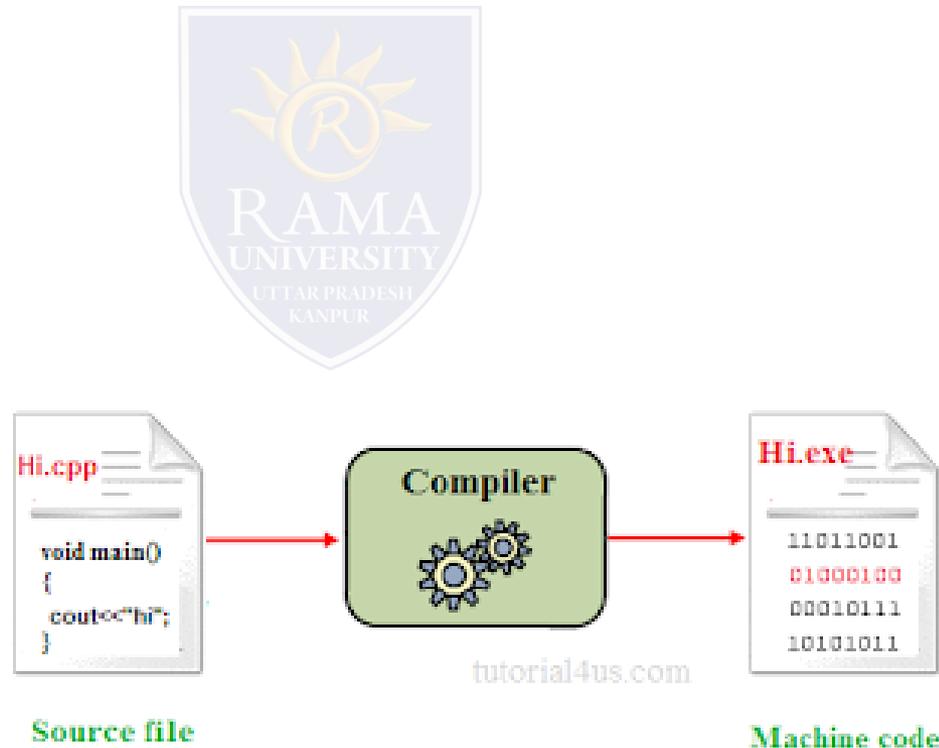
Topics Covered

Programming Language processors
Assembler
Interpreter



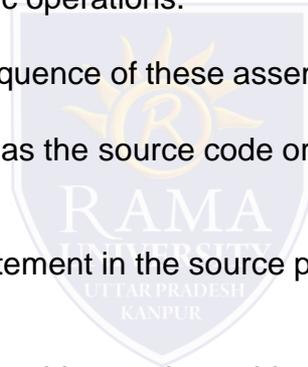
Programming Language processors

- The language processor is a special translator system used to turn a program written in a high-level language, which we call "source code", into machine code, which we call "object program" or "object code".
- There are three types of language processors:
 - Assembler
 - Interpreter
 - Compiler



Assembler

- An assembler is a program that takes basic computer instructions and converts them into a pattern of bits that the computer's processor can use to perform its basic operations.
- The programmer can write a program using a sequence of these assembler instructions
- This sequence of assembler instructions, known as the source code or source program, is then specified to the assembler program when that program is started.
- The assembler program takes each program statement in the source program and generates a corresponding bit stream or pattern
- .
- The output of the assembler program is called the object code or object program relative to the input source program
- The object program can then be run (or executed) whenever desired.



Interpreter

- *Interpreter* is a program that executes instructions written in a high-level language.
- The most common is to compile the program; the other method is to pass the program through an interpreter.
- interpreters are sometimes used during the development of a program, when a programmer wants to add small sections at a time and test them quickly.
- BASIC and LISP are especially designed to be executed by an interpreter.



How Interpreter Works

