

JAVA PROGRAMMING ZERO TO HERO

DAY-1 ASSIGNMENT

QUES-1

Humans can understand anything through natural languages, but a computer doesn't. The computer needs a translator to convert the languages written in the human-readable form to the computer-readable form. Compiler and interpreter are the types of a language translator.

The major differences between them are:

- A compiler is a translator which transforms source language (high-level language) into object language (machine language). In contrast with a compiler, an interpreter is a program which imitates the execution of programs written in a source language.
- Compiler converts the whole program in one go on the other hand Interpreter converts the program by taking a single line at a time.
- Compiler generates intermediate object code whereas an interpreter does not produce any intermediate object code.
- The compilation is done before execution but in case of interpreter compilation and execution take place simultaneously.
- Compiler is comparatively faster whereas interpreter is slower.
- In case of compiler memory requirement is more due to the creation of object code but an interpreter requires less memory as it does not create intermediate object code.
- Compiler display all errors after compilation, all at the same time where as an interpreter displays error of each line one by one.
- Error detection in case of compiler is difficult where as it is easy in case of an interpreter.

QUES-2

```
import java.util.Scanner;

public class GetStudentDetails
{
    public static void main(String args[])
    {
        String name;
        int roll;
        float marks;

        Scanner SC=new Scanner(System.in);

        System.out.print("Enter Name: ");
        name=SC.nextLine();

        System.out.print("Enter Roll Number: ");
        roll=SC.nextInt();

        System.out.print("Enter Marks: ");
        marks=SC.nextFloat();

        System.out.println("Name: " + name );
        System.out.println("Roll Number: " + roll );
        System.out.println("Marks: " + marks );

    }
}
```