DAY 1 ASSIGNMENT

1. Mention the difference between Interpreter and Compiler.

COMPARISON	INTERPRETER	COMPILER
TRANSLATION TYPE	An interpreter translates one statement of programming code at a time into machine code.	A compiler translates complete high-level programming code into machine at once.
OUTPUT	It does not produce any intermediate object code.	It generates intermediate object code.
WORKING MECHANISM	Compilation and execution take place simultaneously.	The compilation is done before execution.
SPEED	Interpreter execute conditional control statements at a much **slower** speed.	Compiler executes conditional control statements and logical constructs **faster than** Interpreter.
MEMORY	It requires less memory as it does not create intermediate object code.	Memory requirement is more due to the creation of object code.
ERRORS	Keeps translating the program continuously till the first error if confronted .If any error is spotted , it stops working and hence debugging becomes easy.	A Compiler generates the error message only after it scans the complete program and hence debugging is relatively harder while working with a compiler.
MACHINE CODE	It never stores the machine code at all on the disk.	It stores the converted machine code from your source code program on the disk.
ADVANTAGE	As the source code is interpreted line-by-line, error detection and correction become **easy.**	As the source code is already converted into machine code, the code execution time becomes **short.**
PERTAINING PROGRAMMING LANGUAGES	PHP, Port, Python, Ruby uses an Interpreter.	C,C++,C#, Scala, typescript Uses compiler.

2. Define a class student with following members :
int roll , String name , float marks.
input() to take input of the details
display() to all details of a student.

Write a program to which will store details of a student and print the details using the above.

PROGRAM:

```
import java .util. Scanner;
class Students
{
 int roll;
 String name;
 float marks;

  void display()
 {
  Scanner sc= new Scanner(System.in);
  roll= sc.nextInt();
  name= sc.nextline();
  marks= sc.nextFloat();
  System.out.println("Roll.No:"+roll+"\nname:"+name+"\nmarks:"+marks);
  }
 }

 public class Main
 {
 public static void main(string[ ] args)
 {
  Students obj=new Students();
  obj.display();
  }
 }
```