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| Interpreter translates just one statement of the program at a time into machine code. | Compiler scans the entire program and translates the whole of it into machine code at once. |
| An interpreter takes very less time to analyse the source code. However, the overall time to execute the process is much slower. | A compiler takes a lot of time to analyse the source code. However, the overall time taken to execute the process is much faster. |
| An interpreter does not generate an intermediary code. Hence, an interpreter is highly efficient in terms of its memory. | A compiler always generates an intermediary object code. It will need further linking. Hence more memory is needed. |
| Keeps translating the program continuously till the first error is 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. |
| Interpreters are used by programming languages like Ruby and Python for example. | Compliers are used by programming languages like C and C++ for example. |

Q) Mention the difference between interpreter and compiler.

Q). 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

import java.util.Scanner;

public class Student

{

private String name;

private int eng;

private int hn;

private int mts;

private double total;

private double avg;

public void accept() {

Scanner in = new Scanner(System.in);

System.out.print("Enter student name: ");

name = in.nextLine();

System.out.print("Enter marks in English: ");

eng = in.nextInt();

System.out.print("Enter marks in Hindi: ");

hn = in.nextInt();

System.out.print("Enter marks in Maths: ");

mts = in.nextInt();

}

public void compute() {

total = eng + hn + mts;

avg = total / 3.0;

}

public void display() {

System.out.println("Name: " + name);

System.out.println("Marks in English: " + eng);

System.out.println("Marks in Hindi: " + hn);

System.out.println("Marks in Maths: " + mts);

System.out.println("Total Marks: " + total);

System.out.println("Average Marks: " + avg);

}

public static void main(String args[]) {

Student obj = new Student();

obj.accept();

obj.compute();

obj.display();

}

}