

**Semester Assignment spring 2020**

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**Subject: Object Oriented Programming**

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**Answer NO1:**

**//Definition of CLASS**

**//A class is a user defined blueprint or prototype from which**

**//objects are created. It represents the set of properties or**

**//methods that are common to all objects of one type. In general,**

**//class declarations can include these components, in order**

**// Definition of OBJECT:**

**//It is a basic unit of Object Oriented Programming and**

**//represents the real life entities. A typical Java**

**//program creates many objects, which as you know, interact by invoking method**

**// Class Declaration**

**//Example of class as follow:**

**//Declaration of class**

**public class Bilal {**

 **// Instance Variables**

 **String name;**

 **int age;**

 **String color;**

 **// Constructor Declaration of Class**

 **public Bilal(String name,**

 **int age, String color)**

 **{**

 **this.name = name;**

 **this.age = age;**

 **this.color = color;**

 **}**

 **// method 1**

 **public String getName()**

 **{**

 **return name;**

 **}**

 **// method 2**

 **public int getAge()**

 **{**

 **return age;**

 **}**

 **// method 3**

 **public String getColor()**

 **{**

 **return color;**

 **}**

 **@Override**

 **public String toString()**

 **{**

 **return("Hi my name is "+ this.getName()+**

 **".\nage and color are "**

 **+"," + this.getAge()+**

 **","+ this.getColor());**

 **}**

 **public static void main(String[] args)**

 **{**

 **Bilal b = new Bilal("Bilal Kabir", 19, "white");**

 **System.out.println(b.toString());**

 **}**

 **}**

**Answer NO2:**

**package table;**

**//Scanner is a class in java. util package used for obtaining**

**//the input of the primitive types like int, double, etc. and**

**//strings. It is the easiest way to read input in a Java program,**

**//though not very efficient if you want an input method for scenarios where**

**//time is a constraint like in competitive programming**

**import java.util.Scanner; //Java library**

**// declaration of class table**

**public class table**

**{**

 **public static void main(String[] args) // DESCRIPTION OF EACH LINE CODE**

 **{**

 **Scanner s = new Scanner(System.in); // Here we create an object of a class s**

 **// s that user can read input through keyboard**

 **System.out.print("Enter number:"); //Print a message for user enter data or**

 **//number of particular table to display**

 **int n=s.nextInt();**

 **for(int i=1; i <= 10; i++) // This is loop and this will run up to 10**

 **{**

 **System.out.println(n+" \* "+i+" = "+n\*i);// this is calculation**

 **// first we will get n from user "+"**

 **// is the concatenation of multiple**

 **// values and then in the double \* sign**

 **// and then i and the then multiply n**

 **// with loop i**

 **}**

 **}**

**}**

**Answer NO3:**

**public class CarOnePerformance {**

 **// Instance Variables**

 **String Carname;**

 **int Milage;**

 **String color;**

 **// Constructor Declaration of Class**

 **public CarOnePerformance(String Carname,**

 **int Milage, String color)**

 **{**

 **this.Carname = Carname;**

 **this.Milage = Milage;**

 **this.color = color;**

 **}**

**}**

**// method 1**

**public String getName()**

**{**

 **return Carname;**

**}**

**// method 2**

**public int getMilage()**

**{**

 **return Milage;**

**}**

**// method 3**

**public String getColor()**

**{**

 **return color;**

**}**

**@Override**

**public String toString()**

**{**

 **return("This is "+ this.getName()+**

 **".\nKm/hour and color is:"**

 **+"," + this.getMilage()+**

 **","+ this.getColor());**

**}**

**public static void main(String[] args)**

**{**

 **CarOnePerformance car = new CarOnePerformance("BMW", 20, "white");**

 **System.out.println(car.toString());**

**}**

**}**

**public class CarTwoPerformance {**

 **// Instance Variables**

 **String Carname;**

 **int Milage;**

 **String color;**

 **// Constructor Declaration of Class**

 **public CarTwoPerformance(String Carname,**

 **int Milage, String color)**

 **{**

 **this.Carname = Carname;**

 **this.Milage = Milage;**

 **this.color = color;**

 **}**

**}**