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Exam Mid-term

Subject OOP

Submmited to Sir. Ayub

1

Q NO.1

Class: A class is a user define blue print or prototype from which object are creat. it represent set of properties or method that are common to all object of one time in General class Declaration can include these component, modifiers class name, superclass, Interface, Body.

object it is a basic unit of object oriented programming and represent the real life entities. every thing is object if it have state and behivure. for example, cat, bat, pen, etc

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// class Declaration

Public class Dog

{

// Instance Variables

String name;

String breed;

int age;

String color;

// constructor Declaration of class

Public Dog (string name, string breed,

int age, string color)

{

this.name = name;

this.breed = breed;

this.age = age;

this.color = color;

}

// method 1

public String getName()

{

return name;

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```
// method 2
public String getBreed()
{
    return breed;
}
// method 3
Public int getAge()
{
    return age;
}
// method 4
public string getColor()
{
    return color;
}
Public String toString()
{
return("Hi my name is" + this.g
                        Name() +
"\n breed age and color are" +
this.getBreed() + " " + this.getAge() +
```

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```
"," + this.getColor();
}
Public static void main(String[]args)
{
Dog tuffy= new Dog("tuffy",
"papillon",5
system.out.Println(tuffy.to String());
```

role of objects.

Thus we need object to store data values so that we can do whatever operations we like to perform on them. In Java, object is created to call the non-static function which are present inside the Main Method but present inside the class

QNo.2

```
Public class rehman{ // rehman is
                        the main function class
Public static void main(string[]args)
    { //  Main fun
        int mem;
            Scanner ty = new Scanner(System.in); //
// ty is the object used to talk input from user.
            system.out.Println("Enter the no");
            mem = ty.nextInt();
            bx tab = new bx(mem); // tab is
the objec used for class.
            tab.table(); // table method
                        is called
    }
}
class bx // bx is class name
    int un;
    bx(int a)// constructor with 1
                                parameter
    un = t
}
    void table()
    {
        int p=0;
```

```
for(int j=1; j<=12; j++)
    {

p=un*j;

system.out.Println("Table for"+p);
    }
}
}
```

Explanation:

In this program I took the last function class name rehman then I took main function of Program, in next step I took variable name member and I took fg object which used to take input from user. in next step tab is the object used for class.

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nem is the Parameter sent to the constructor. In next step method is by table. After this br is the name our class. and Constractor is used with one Parameter. in next step method is used of type void the I took local variable P and j. then I printed my statement.

Q.NO.3

```
Pakage cars;
Public class Cars()
Public static void main(String[]
        args){
 rehman car Hunda=new rehmancar();
rehman cat Auto = new rehman cat();
    hunda.tSpeed = 800;
    hunda.accSP = 600;
    hunda.fuedcap = 150;
    hunda.fued consum = 50.8;
    auto.tspeed = 700;
    auto.accSP = 500;
    auto.fuedcap = 100;
    auto.fued consum = 25.7;
System.out.Println(" total speed of hunda="
        +hunda.tspeed +"KM/h);
system.out.println("accelerating speed of
hunda =" + hunda.accsp + "KM/h");
```

```
System.out.println("Total speed of Auto"+
  KM/h");

System.out.println("Accelerating Speed of
  auto = "+ auto.accsp+" KM/h");

system.out.Println("Hunda car
  Performance");

  hunda perfo();
system.out.println("Hunda car performance
                    ");
  auto perfo();
```

```
package car;

public class rehmancar {

  int tspeed;
  double fuelcap;

  double fuelconsum;

  void perfo()

  {

    double q;

  System.out.println("Performance="+q);

  }
```

10

Explanation:

In fast funtion I took class name cars. In next step I took main function, in next step I took new object name Auto, then I Declare totall speed, accelertel fuel, fuel consum, and in next step I Declare the all previus funtion of both hunda and Auto. And in next step I Declare all variable and its type of data then I took the step of printing the Perfamance of both cats.