

(1)

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Q No 1

Class:  
Class are blue print or a set of instructions to build a specific type of object. It is a basic concept of object-oriented programming which revolve around the real-life entities. Following the general syntax of a class.

General syntax:

```
class <class-name> {  
    field;  
    method;  
}
```

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## Object:

Object is an instance of a class. An object is nothing but a self-contained component which contains a component which consists of methods and properties to make a particular type of data useful. For example, colour, name, table, bag, barking. When you send a message of an object, you are asking the object to invoke or execute one of its object method as defined in the class.

## General syntax:

```
Class Name Reference Variable  
= new ClassName();
```

## Program Example

// class declaration

```
public class Dog {  
    // instance variable  
    String breed;  
    String size;  
    int age;  
    String color;  
    // method 1
```

```
    public String getInfo()  
    {
```

(3)

```
return ("Bread is: " + Bread +  
Size is: " + Size +  
Age is " + age + Color is " + color);  
}
```

```
public static void main  
(String[] Args) {
```

```
    Dog maltese = new  
    Dog();  
    maltese.bread = "maltese"  
    maltese.size = "medium";  
    maltese.age = 5;  
    maltese.color = "yellow"
```

```
    System.out.println  
(maltese.getInfo());
```

```
    }  
}
```

Output

Bread is: maltese Size is  
medium Age is: 5  
Color is: Yellow

Q No 2

Ans

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### Solution

```
# table in python
# taking input from user
table = int(input("input a number"))
# use for loop to iterate 10 times
for i in range(1, 11):
    print(n, 'x', i, '=', n*i)
```

Output:

```
3 x 1 = 3
3 x 2 = 6
3 x 3 = 9
3 x 4 = 12
3 x 5 = 15
3 x 6 = 18
3 x 7 = 21
3 x 8 = 24
3 x 9 = 27
3 x 10 = 30.
```

### Explanation:

- (1) I use the python ide for table
- (2) And then taken the input from user.
- (3) And use for loop to executing the program.
- (4) And then written the formula for print the program.
- (5) And then show the output on the screen.

(5)

Q No 3

Ans

```
import java.util.Scanner;
public class Exercise {
    public void main (String[] args) {
        Scanner in = new Scanner (System.in);
        System.out.print ("input speed (km/h)
        of first car:");

        System.out.print ("input speed
        (km/h) of second car:");

        System.out.println ("performance
        of two cars is : " + (car1 + car2)/2);
    }
}
```

Output

```
input speed km/h of
first car is: 90
input speed of km/h of second car: 100
Average performance is: 95
```