



Object: A Java object is a **member (also called an instance) of a Java class**. Each object has an identity, a behaviour and a state. The state of an object is stored in fields (variables), while methods (functions) display the object's behaviour. Objects are created at runtime from templates, which are also known as classes.

Java->Object Oriented Programming Language.

object->,get access or start execution.

Syntax:

ClassName reference_variable=new ClassConstructor();

e.g: Main obj1=new Main();

Class members can be accessed using object of the class.

e.g

```
class Main
{
    int a=23;
    psvm()
    {
        Main obj1=new Main();
        System.out.println("a is:"+obj1.a);//23
    }
}
```



class members can be initialized using object of the class.

```
class Main
{
    int a;
    psvm()
    {
        Main obj1=new Main();

        obj1.a=13;

        System.out.println("a is:"+obj1.a);//13
    }
}
```

method:

1.It is a block of code that executes a targeted logic.

2.it has 3 pillars 1: Method Declaration 2:Method Definition 3.Method Calling

3. Syntax:

```
return type method_name()
{
    logic...
}
```

4.A method in java is called using object of the class.

obj1.method_name(); where obj1 is reference variable.



```
public class Main
{
    int num1=47;
    int num2=19;
    char ch='k';
    boolean b=true;
    boolean b2=false;
    //-----

    int num3;
    char ch2;           //No initialization
    long lg;
    double db;

    public static void main(String[] args)
    {
        Main obj1=new Main();// new->object(memory)
obj1->reference variable
        int num4=200;
        System.out.println("num4 is:"+num4);

        System.out.println("num1 is:"+obj1.num1);
        System.out.println("num2 is:"+obj1.num2);
        System.out.println("ch is:"+obj1.ch);
        System.out.println("boolean b is:"+obj1.b);
        System.out.println("boolean b2 is:"+obj1.b2);
        //-----

        System.out.println("\n-----\n");
        obj1.num3=100;
        System.out.println("num3 is:"+obj1.num3);

        obj1.ch2='R';
        System.out.println("ch2 is:"+obj1.ch2);
    }
}
```



```
obj1.lg=123456;  
System.out.println("lg is:"+obj1.lg);
```

```
obj1.db=12345.56574;  
System.out.println("db is:"+obj1.db);
```

```
    }  
}
```

OutPut:-

```
num4 is:200  
num1 is:47  
num2 is:19  
ch is:k  
boolean b is:true  
boolean b2 is:false
```

```
num3 is:100  
ch2 is:R  
lg is:123456  
db is:12345.56574
```

