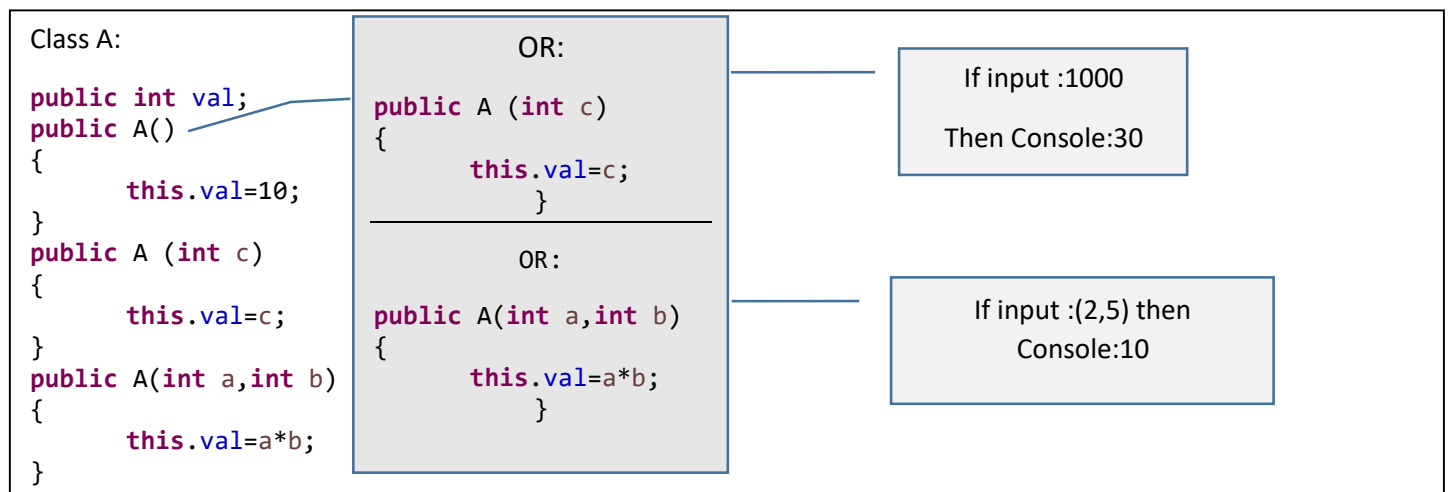


## Exercise1: Using a lot of constructor functions with the super element.



```
A.java Main.java *B.java C.java  
5 {  
6     System.out.println("classA");  
7     System.out.println("www.google.com");  
8 }  
9 }  
10 public int val;  
11 public A()  
12 {  
13     this.val=10;  
14 }  
15 public A (int c)  
16 {  
17     this.val=c;  
18 }  
19 public A(int a,int b)  
20 {  
21     this.val=a*b;  
22 }  
23 public void Dummy()  
24 {  
25     this.printA();  
26     System.out.println("Dummy");  
27 }  
28 }  
29 }  
30 }  
<  
Console  
terminated> Main [Java Application] C:\Program Files\Java\jdk-1  
1000
```

## EX2:Using set and get with private.

```
package Two;

public class A1 {
    private int val;
    public A1()
    {
        this.val=19;
    }
    public void setval(int k)
    {
        this.val=k;
    }
    public int getval()
    {
        return this.val;
    }
}
```

```
package Two;

public class Pract1 {

    public static void main(String[]args){
        A1 n=new A1();
        n.setval(77);
        int y=n.getval();
        System.out.println(y);
    }
}
Console: 77
```

---

## EX3: Application of the first part of the program(Simlecalc Class).

```
package Two;

public class Pract1 {
    public static void main (String[] args)
    {

        Simlecalc calcadd= new Simlecalc(10,20);
        int resultadd=calcadd.add();
        System.out.println("The result Add is :
        "+resultadd);
        Simlecalc calcsub=new Simlecalc(10,20);
        int resultsub=calcsub.sub();
        System.out.println("The result Sub is
        :"+resultsub);
    }
}
```

Console:

The result Add is : 30  
The result Sub is :-10

```
package Two;

public class Simlecalc {
    private int x;
    private int y;
    public Simlecalc ()
    {
        this.x=0;
        this.y=0;
    }
    public Simlecalc(int a, int b)
    {
        this.x=a;
        this.y=b;
    }
    public int add()
    {
        return this.x+this.y;
    }
    public int sub ()
    {
        return this.x-this.y;
    }
}
```

#### EX4: Application of the second part of the program(Simlecalc Class).

```
package Two;

public class Pract1 {
    public static void main (String[] args)
    {

        Simlecalc calcadd= new Simlecalc(10,20);
        int resultadd=calcadd.add();
        System.out.println("The result Add is :
        "+resultadd);
        Simlecalc calcsb=new Simlecalc(10,20);
        int resultsub=calcsb.sub();
        System.out.println("The result Sub is
        :"+resultsub);
        System.out.println("-----");
        Simlecalc calca3=new Simlecalc();
        calca3.setx(4);
        calca3.sety(10);
        int res3=calca3.add();
        System.out.println("The Result is :"+res3);
        System.out.println("-----");
        calca3.setx(100);
        calca3.sety(200);
        System.out.println("The Result is
        :"+calca3.getx());
        System.out.println("-----");
        System.out.println("The Result is
        :"+calca3.gety());
    }
}
```

##### Console:

```
The result Add is : 30
The result Sub is :-10
-----
The Result is :14
-----
The Result is :100
-----
The Result is :200
```

```
package Two;

public class Simlecalc {
    private int x;
    private int y;
    public Simlecalc ()
    {
        this.x=0;
        this.y=0;
    }
    public Simlecalc(int a, int b)
    {
        this.x=a;
        this.y=b;
    }
    public int add()
    {
        return this.x+this.y;
    }
    public int sub ()
    {
        return this.x-this.y;
    }
    public void setx(int a) {
        this.x=a;
    }
    public void sety(int a)
    {
        this.y=a;
    }
    public int getx()
    {
        return this.x;
    }
    public int gety()
    {
        return this.y;
    }
}
```

## EX5: Application of the first part of the program(Anothercalca Class).

```
package Two;

public class Pract1 {
    public static void main (String[] args)
    {

        Anothercal calca= new
        Anothercal(10,20);
        int result=calca.add();
        System.out.println(result);
        calca.setx(100);
        calca.sety(110);
        result=calca.add();
        System.out.println(result);
        System.out.println(calca.getx());
        System.out.println(calca.gety());
    }
}
```

Console:

```
30
210
100
110
```

```
package Two;

public class Pract1 {
    public static void main (String[] args)
    {

        Anothercal calca= new Anothercal(10,20);
        int result=calca.add();
        System.out.println(result);
        calca.setx(100);
        calca.sety(110);
        result=calca.add();
        System.out.println(result);
        System.out.println(calca.getx());
        System.out.println(calca.gety());
    }
}
```

=====

## EX6:using inherent with capsule and encapsulate data inside the classes.

```
package Two;

public class Pract1 {
    public static void main (String[] args)
    {

        Anothercal calca= new
        Anothercal(10,20);
        int result=calca.add();
        System.out.println(result);
        result=calca.mul();
        System.out.println(result);
        result=calca.div();
        System.out.println(result);
    }
}
```

Console:

```
30
200
0
```

```
package Two;

public class Anothercal extends Simlecalc {
    public Anothercal()
    {
        super();
    }
    public Anothercal (int a,int b)
    {
        super(a,b);
    }
    public int mul()
    {
        return this.getx()*this.gety();
    }
    public int div()
    {
        int y=this.gety();
        if(y==0)
            return 0;
        return this.getx()/y;
    }
}
```

## EX7:Static method.

```
package Two;

public class Pract1 {
    public static void main (String[] args)
    {
        int result= A.Add(10,5);
        System.out.println(result);
        result=A.sub(12, 15);
        System.out.println(result);
        result=A.mul(100, 2);
        System.out.println(result);
        result=A.div(100, 5);
        System.out.println(result);
    }
}
```

Console:

```
15
-3
200
20
```

```
package Two;

public class A {

    public static int Add(int a,int b)
    {
        return a+b;
    }
    public static int sub(int a,int b)
    {
        return a-b;
    }
    public static int mul(int a, int b)
    {
        return a*b;
    }
    public static int div(int a,int b)
    {

        if (b==0)
            return 0;
        return a/b;
    }
}
```

## EX8: Overload application inside the classes.

```
package Two;

public class Pract1 {
    public static void main (String[] args)
    {
        Overloading m=new Overloading();
        int R=m.Add(10, 90);
        System.out.println("The Result of int
input is:"+R);
        float k=m.Add(1.5f, 3.5f);

        System.out.println("The Result of int
input is:"+k);
        double DF=m.Add(77, 33);
        System.out.println("The Result of int
input is:"+DF);
    }
}
```

Console:

```
The Result of int input is:100
The Result of int input is:5.0
The Result of int input is:110.0
```

```
package Two;

public class Overloading {
    public int Add(int a, int b)
    {
        return a+b;
    }
    public float Add(float a,float b)
    {
        return a+b;
    }
    public double Add(double a,double b)
    {
        return a+b;
    }
}
```