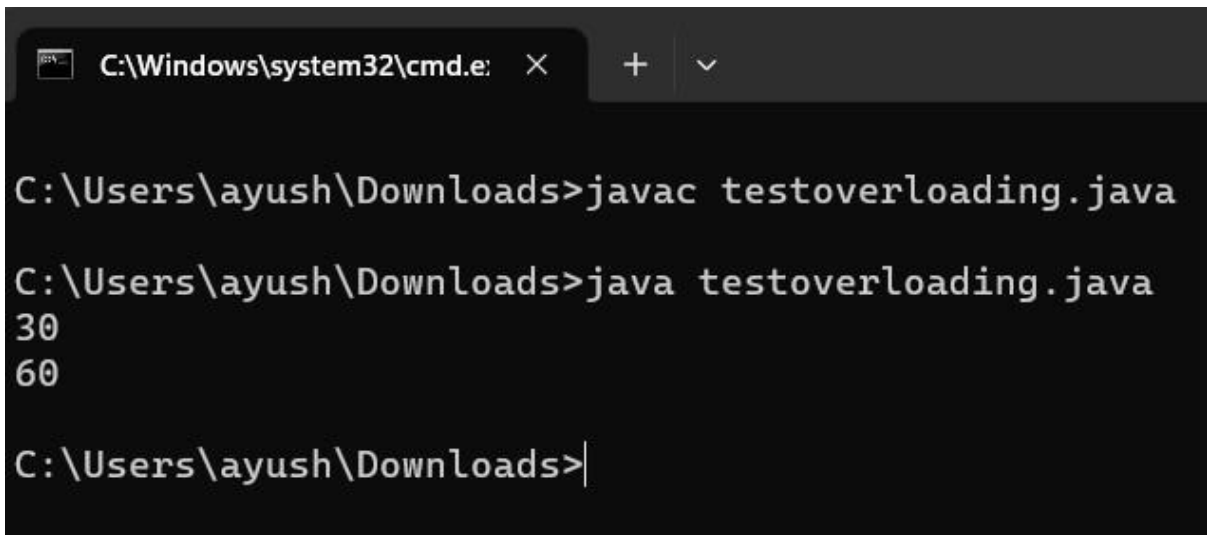


Exp:Implement a program on method and constructor overloading.

1.

```
class testoverloading{  
    public static void main(String args[]){  
        System.out.println(adder.add(10,20));  
        System.out.println(adder.add(10,20,30));  
    }  
}  
  
class adder{  
    static int add(int a,int b){return a+b;}  
    static int add(int a,int b,int c){return a+b+c;}  
}
```

OUTPUT:



```
C:\Windows\system32\cmd.e:  X  +  v  
  
C:\Users\ayush\Downloads>javac testoverloading.java  
  
C:\Users\ayush\Downloads>java testoverloading.java  
30  
60  
  
C:\Users\ayush\Downloads>|
```

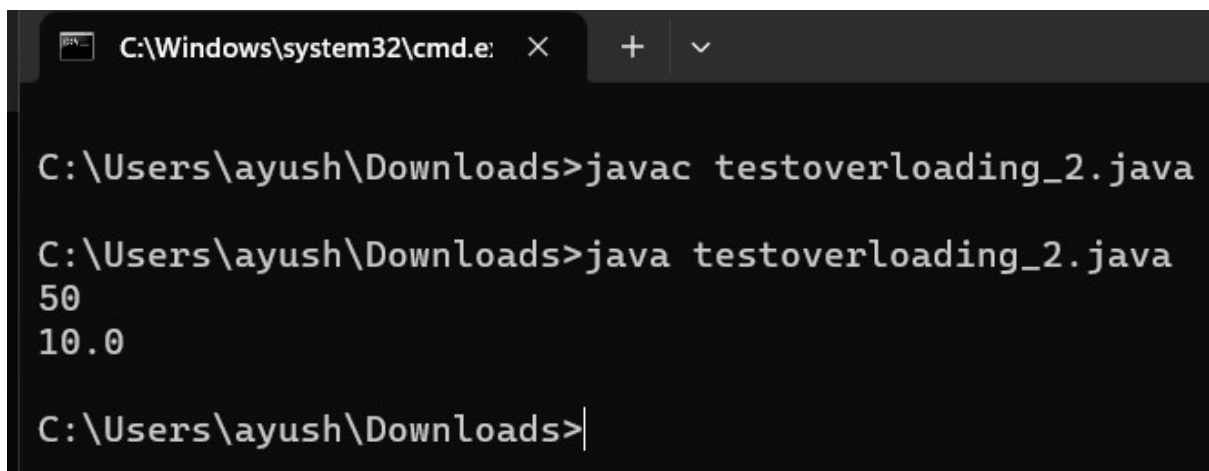
```
2. class testoverloading_2{  
    public static void main(String args[]){  
        System.out.println(operation.sub(100,50));  
    }  
}
```

```

System.out.println(operation.mul(2,5));
}
}
class operation{
static int sub(int a, int b){return a-b;}
static double mul(int a, int b){return a*b;}
}

```

OUTPUT:



The screenshot shows a Windows command prompt window with the title bar 'C:\Windows\system32\cmd.e'. The command history is as follows:

```

C:\Users\ayush\Downloads>javac testoverloading_2.java

C:\Users\ayush\Downloads>java testoverloading_2.java
50
10.0

C:\Users\ayush\Downloads>

```

3.

```

import java.util.*;

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

Scanner sc=new Scanner(System.in);

System.out.print("Enter option\n1.changing no of arguments\n2.changing data type of
arguments\n");

int opt=sc.nextInt();

switch(opt)
{
case 1:
{

```

```
System.out.println("enter numbers to be added");  
int x=sc.nextInt();  
int y=sc.nextInt();  
int z=sc.nextInt();  
System.out.println(adder.add(x,y));  
System.out.println(adder.add(x,y,z));  
}
```

case 2:

```
{  
int a =sc.nextInt();  
int b =sc.nextInt();  
double n = sc.nextDouble();  
double m = sc.nextDouble();  
System.out.println(operation.add(a,b));  
System.out.println(operation.add(n,m));  
}  
}  
}  
}
```

class adder

```
{  
static int add(int x,int y){return x+y;}  
static int add(int x,int y,int z){return x+y+z;}  
}
```

class operation

```
{  
static int add(int a,int b){return a+b;}  
static double add(double n,double m){return n+m;}  
}
```

OUTPUT:

```
C:\Windows\system32\cmd.e: X + v
Microsoft Windows [Version 10.0.22621.2428]
(c) Microsoft Corporation. All rights reserved.

C:\Users\ayush>cd Downloads

C:\Users\ayush\Downloads>javac swi_ovl.java

C:\Users\ayush\Downloads>java swi_ovl.java
Enter option
1.changing no of arguments
2.changing data type of arguments
1
enter numbers to be added
2
3
4
5
9
|
```