

BASIC JAVA PROGRAMS

AIM: IF AND ELSE

CODE:

```
import java.util.Scanner;

public class Even
{
    public static void main(String[] args)
    {
        int n;

        Scanner s = new Scanner(System.in);

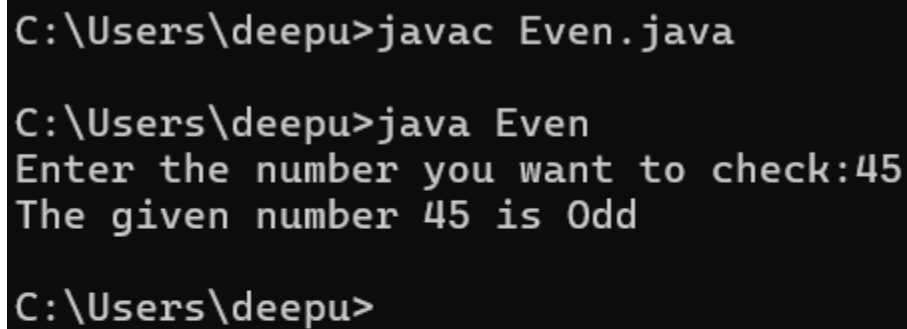
        System.out.print("Enter the number you want to
check:");

        n = s.nextInt();

        if(n % 2 == 0)
        {
            System.out.println("The given number "+n+" is Even ");
        }
        else
        {
```

```
        System.out.println("The given number "+n+" is Odd ");
    }
}
}
```

OUTPUT:



```
C:\Users\deepu>javac Even.java

C:\Users\deepu>java Even
Enter the number you want to check:45
The given number 45 is Odd

C:\Users\deepu>
```

Aim: Condition statements

Code:

```
import java.util.Scanner;

class conditional {

    public static void main(String[] args){

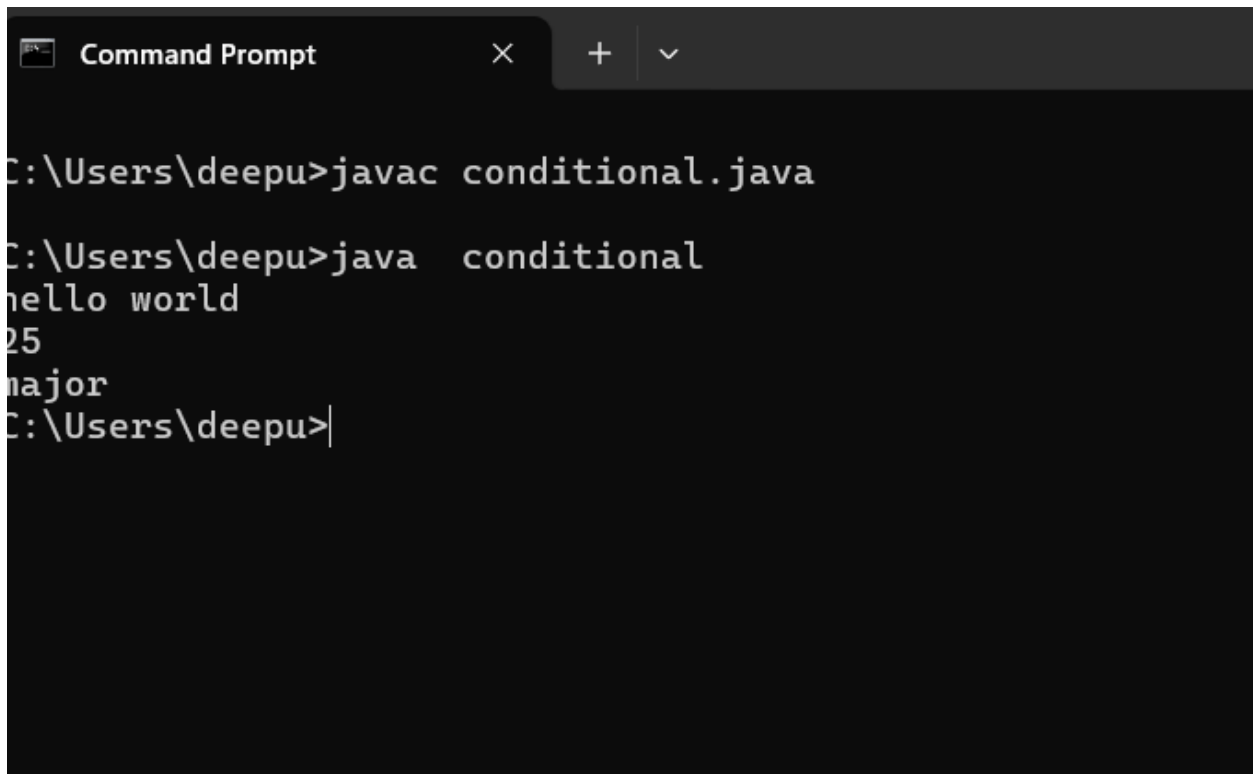
        System.out.println("hello world");

        Scanner a=new Scanner(System.in);

        int age=a.nextInt();
```

```
    if (age<18){  
        System.out.print("minor");  
    }  
    else if(age<60){  
        System.out.print("major");  
    }  
    else{  
        System.out.print("senior");  
    }  
  
}  
  
}
```

OUTPUT:



```
Command Prompt
C:\Users\deepu>javac conditional.java
C:\Users\deepu>java conditional
hello world
25
major
C:\Users\deepu>
```

AIM:

SWITCH CASE

CODE:

```
import java.util.Scanner;

public class Calculate
{
    public static void main(String[] args)
    {
        int m, n, opt, add, sub, mul;
        double div;
```

```
Scanner s = new Scanner(System.in);  
System.out.print("Enter first number:");  
m = s.nextInt();  
System.out.print("Enter second number:");  
n = s.nextInt();  
while(true)  
{  
    opt = s.nextInt();  
    switch(opt)  
    {  
        case 1:  
            add = m + n;  
            System.out.println("Result:"+add);  
            break;  
  
        case 2:  
            sub = m - n;  
            System.out.println("Result:"+sub);  
            break;
```

case 3:

mul = m * n;

System.out.println("Result:"+mul);

break;

case 4:

div = (double)m / n;

System.out.println("Result:"+div);

break;

case 5:

System.exit(0);

}

}

}

}

Output:

```
Command Prompt - java Calc × + v
C:\Users\deepu>javac Calculate.java
C:\Users\deepu>java Clculate
Error: Could not find or load main class Clculate
Caused by: java.lang.ClassNotFoundException: Clculate
C:\Users\deepu>java Calculate
Enter first number:34
Enter second number:24
1
Result:58
```

AIM: For loop

CODE:

```
class p1 {
    public static void main(String[] args) {
        for (int i = 0; i <= 5; i = i + 1) {
            for (int j = 0; j <= 5; j = j + 1) {
                System.out.print("*");
            }
            System.out.println("");
        }
    }
}
```

OUTPUT:

```
C:\Users\deepu>javac p1.java
```

```
C:\Users\deepu>java p1
```

```
*****
```

```
*****
```

```
*****
```

```
*****
```

```
*****
```

```
*****
```

```
C:\Users\deepu>
```

AIM:

WHILE LOOP

CODE:

```
import java.util.Scanner;
```

```
public class Sum
```

```
{
```

```
    public static void main(String args[])
```

```
    {
```

```
        int m, n, sum = 0;
```

```
        Scanner s = new Scanner(System.in);
```

```
        System.out.print("Enter the number:");
```

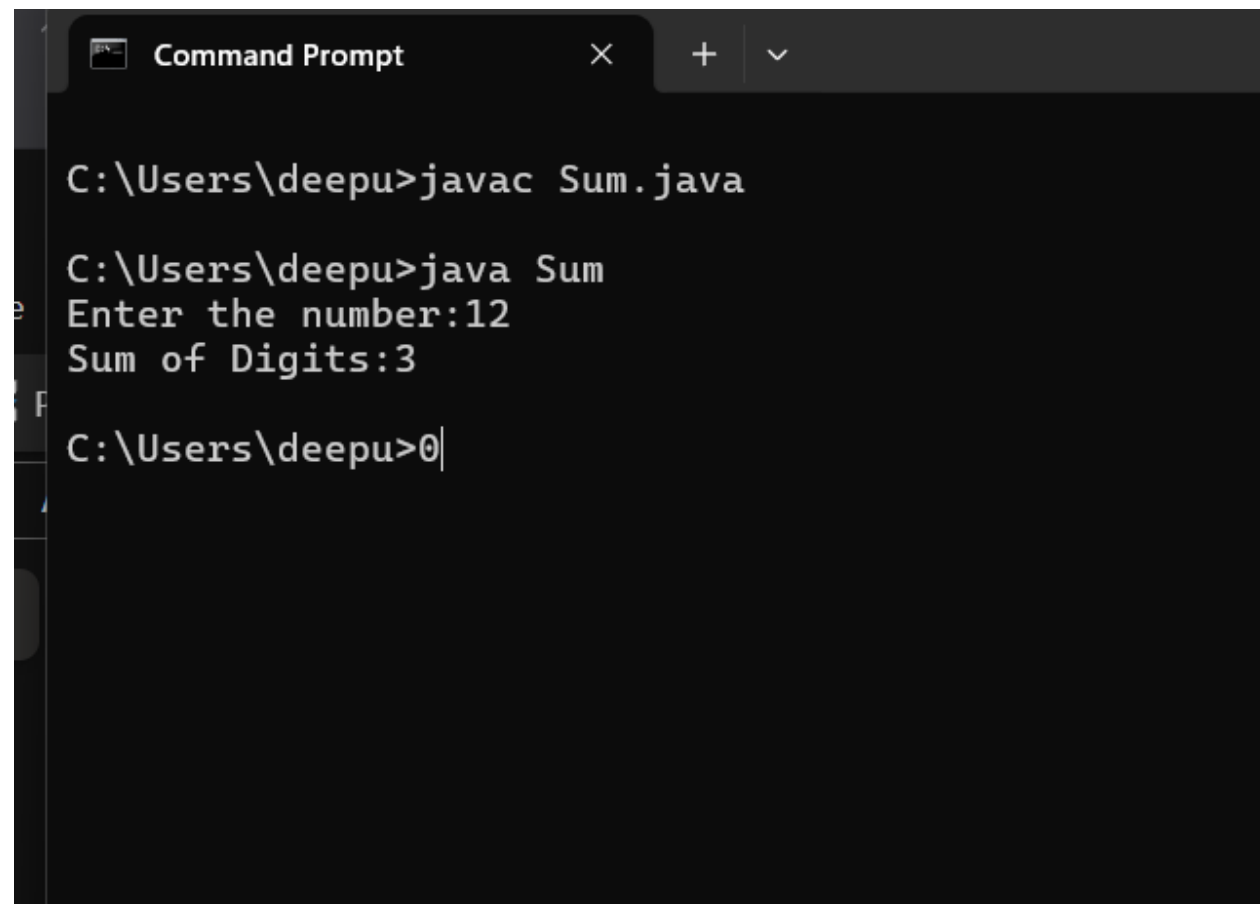
```
        m = s.nextInt();
```

```
        while(m > 0)
```



```
{  
    n = m % 10;  
    sum = sum + n;  
    m = m / 10;  
}  
System.out.println("Sum of Digits:"+sum);  
}  
}
```

OUTPUT:



```
Command Prompt  
C:\Users\deepu>javac Sum.java  
  
C:\Users\deepu>java Sum  
Enter the number:12  
Sum of Digits:3  
  
C:\Users\deepu>0|
```

AIM: TO CHECK PRIME NUMBER OR NOT

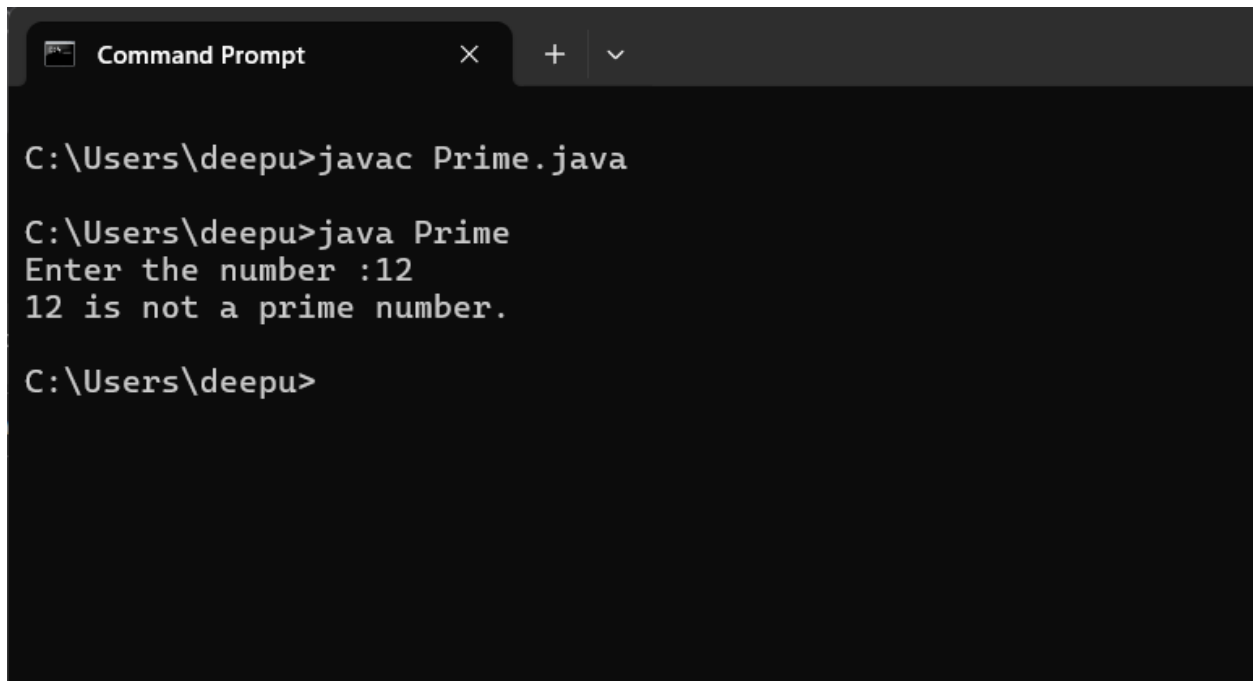
CODE:

```
import java.util.Scanner;

public class Prime
{
    public static void main(String args[])
    {
        int j, num, flag = 0;
        System.out.print("Enter the number :");
        Scanner s = new Scanner(System.in);
        num = s.nextInt();
        for( j = 2; j < num; j++)
        {
            if(num % j == 0)
            {
                flag = 0;
                break;
            }
        }
    }
}
```

```
        else
        {
            flag = 1;
        }
    }
    if(flag == 1)
    {
        System.out.println(""+num+" is a prime number.");
    }
    else
    {
        System.out.println(""+num+" is not a prime number.");
    }
}
}
```

OUTPUT:



```
Command Prompt
C:\Users\deepu>javac Prime.java

C:\Users\deepu>java Prime
Enter the number :12
12 is not a prime number.

C:\Users\deepu>
```

CODE:

```
import java.util.Scanner;

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

    Scanner s = new Scanner(System.in);

    System.out.print("Enter number:");

    int n=s.nextInt();

    for(int i=1; i <= 10; i++)

    { System.out.println(n+" * "+i+" = "+n*i);

    }

}

}
```

OUTPUT:

```
C:\Users\deepu>javac d.java
```

```
C:\Users\deepu>java d
```

```
Enter number:12
```

```
12 * 1 = 12
```

```
12 * 2 = 24
```

```
12 * 3 = 36
```

```
12 * 4 = 48
```

```
12 * 5 = 60
```

```
12 * 6 = 72
```

```
12 * 7 = 84
```

```
12 * 8 = 96
```

```
12 * 9 = 108
```

```
12 * 10 = 120
```

```
C:\Users\deepu>|
```

AIM:

Using scanner class

CODE:

```
import java.util.Scanner;
```

```
public class a
```

```
{
```

```
    public static void main(String args[])
```

```
    {
```

```
        int m, n, temp;
```

```
        Scanner s = new Scanner(System.in);
```

```
System.out.print("Enter the first number:");

m = s.nextInt();

System.out.print("Enter the second number:");

n = s.nextInt();

temp = m;

m = n;

n = temp;

System.out.println("After Swapping");

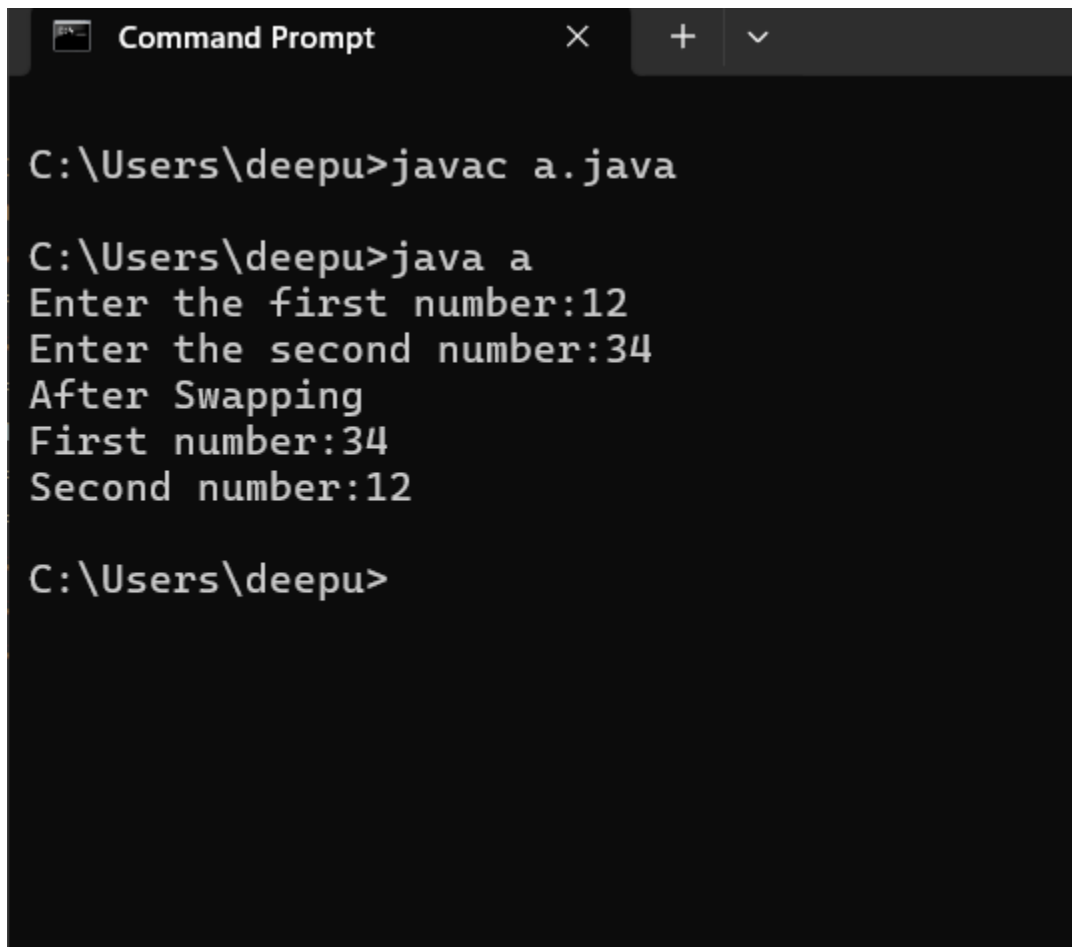
System.out.println("First number:"+m);

System.out.println("Second number:"+n);

}

}
```

OUTPUT:

A screenshot of a Windows Command Prompt window. The title bar reads "Command Prompt" with standard window controls. The command prompt shows the following sequence of commands and output:
C:\Users\deepu>javac a.java

C:\Users\deepu>java a
Enter the first number:12
Enter the second number:34
After Swapping
First number:34
Second number:12

C:\Users\deepu>

AIM: INHERITANCE

CODE:

```
class Animal {
```

```
    String name;
```

```
    public void eat() {
```

```
        System.out.println("I can eat");
```

```
}  
}
```

```
class Dog extends Animal {  
  
    public void display() {  
  
        System.out.println("My name is " + name);  
  
    }  
}
```

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

```
        Dog a = new Dog();
```

```
        a.name = "abc";
```

```
        a.display();
```

```
        a.eat();
```

```
    }
```



```
}
```

OUTPUT:

```
C:\Users\deepu>javac inherit.java
```

```
C:\Users\deepu>java inherit
```

```
My name is abc
```

```
I can eat
```

```
C:\Users\deepu>
```

CODE:

```
class Animal {
```

```
    public void eat() {
```

```
        System.out.println("I can eat");
```

```
    }
```

```
}
```

```
class Dog extends Animal {
```

```
    public void eat() {
```

```
        System.out.println("I eat dog food");
```

```
    }
```

```
    public void bark() {
```

```
        System.out.println("I can bark");
```

```
    }
```

```
}
```

```
class Override{
```

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

```
        Dog a= new Dog();
```

```
        a.eat();
```

```
        a.bark();
```

```
    }
```

```
} class Animal {
```

```
    public void eat() {
```

```
        System.out.println("I can eat");
```

```
    }
```

```
}
```

```
class Dog extends Animal {
```

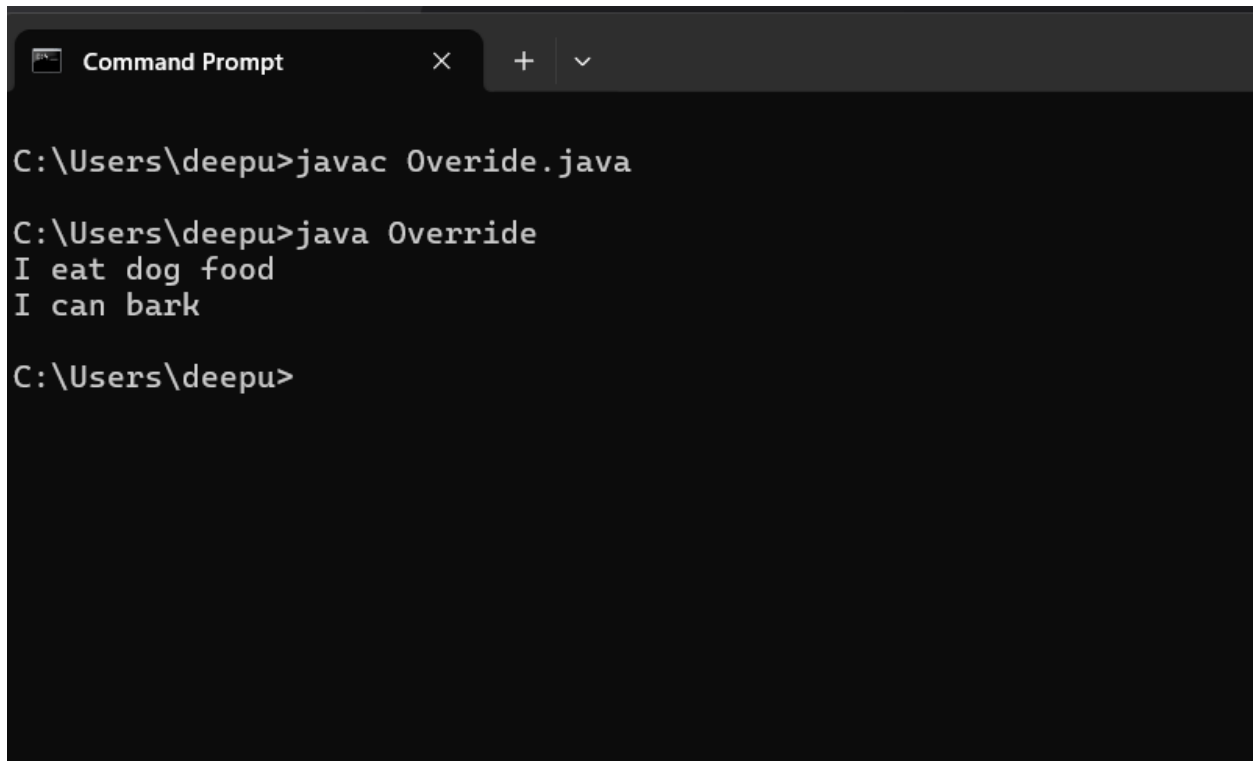
```
public void eat() {  
  
    System.out.println("I eat dog food");  
  
}
```

```
public void bark() {  
  
    System.out.println("I can bark");  
  
}  
}
```

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

```
  
        Dog a= new Dog();  
  
        a.eat();  
        a.bark();  
    }  
}
```

OUTPUT:



```
Command Prompt
C:\Users\deepu>javac Override.java
C:\Users\deepu>java Override
I eat dog food
I can bark
C:\Users\deepu>
```

AIM:

OVERLOAD

CODE:

```
class A{

    public static int Multiply(int a, int b)

    {

        return a * b;

    }
```

```
public static double Multiply(double a, double b)
{

    return a * b;

}

}

public class Overload
{

    public static void main(String[] args) {

        A n=new A();

        System.out.println(n.Multiply(2, 4));

        System.out.println(n.Multiply(5.5, 5.5));

    }

}
```

OUTPUT:

```
C:\Users\deepu>java Overload
8
34.65

C:\Users\deepu>
```