

Programs

Print a name by yourself yourself → (Predefined)

```
Ans
package username;
public class Username
{
    public static void main (String[] args)
    {
        System.out.println ("My name is Abhishek Mishra");
    }
}
```

print a name by accepting name from user ^{Using} BufferedReader

```
import java.io.BufferedReader;
import java.io.IOException;
import java.io.InputStreamReader;
public class name
{
    public static void main (String [] args)
    {
        BufferedReader br = new BufferedReader (new InputStreamReader (System.in));
        try
        {
            String name;
            System.out.println ("Enter your name");
            name = br.readLine ();
            System.out.println ("My name is /t" + name);
        }
        catch (IOException ex)
        {
            System.out.println (" " + ex);
        }
    }
}
```

program for adding two numbers Input by user

```
import java.io.BufferedReader;
import java.io.IOException;
import java.io.InputStreamReader;
public class Add
{
    public static void main (String [] args)
    {
        BufferedReader br = new BufferedReader(new InputStreamReader (System.in));
        try
        {
            int a, b, c;
            System.out.println ("Enter the number");
            a = Integer.parseInt (br.readLine ());
            System.out.println ("Enter the number");
            b = Integer.parseInt (br.readLine ());
            c = a+b;
            System.out.println ("the result is /t" + c);
        }
        catch (IOException ex)
        {
            System.out.println (" " + ex);
        }
    }
}
```

print the details of a product

```
import java.io.BufferedReader;
import java.io.IOException;
import java.io.InputStreamReader;
public class Productdetails
{
    public static void main (String [] args)
    {
        BufferedReader br = new BufferedReader (new InputStreamReader (System.in));
        try
        {
            String productname;
            int productid, qty;
            double price;
            int totalprice;
            System.out.println ("Enter the product name");
            productname = br.readLine ();
            System.out.println ("Enter the productid");
            productid = Integer.parseInt (br.readLine ());
            System.out.println ("Enter the qty");
            qty = Integer.parseInt (br.readLine ());
            System.out.println ("Enter the price");
            price = Double.parseDouble (qty * price, br.readLine ());
            totalprice = qty * price;
            System.out.println ("productname" + productname);
            System.out.println ("productid" + productid);
            System.out.println ("qty" + qty);
            System.out.println ("price" + price);
            System.out.println ("totalprice" + totalprice);
        }
        catch (IOException ex)
        {
            System.out.println (" " + ex);
        }
    }
}
```

Student Marksheet program

```
import java.io.BufferedReader;
import java.io.IOException;
import java.io.InputStreamReader;
public class Studentmarksheetsheet
{
    public static void main(String[] args)
    {
        BufferedReader br = new BufferedReader(new InputStreamReader(System.in));
        try
        {
            String Studentname, Fathername, Mothername;
            int maxmarks, age, English, Hindi, Maths, Science, SST;
            int totalmarks;
            double percentage;
            System.out.println("Enter the Studentname");
            Studentname = br.readLine();
            System.out.println("Enter Fathername");
            Fathername = br.readLine();
            System.out.println("Enter Mothername");
            Mothername = br.readLine();
            System.out.println("Enter the maxmarks");
            maxmarks = Integer.parseInt(br.readLine());
            System.out.println("Enter age");
            age = Integer.parseInt(br.readLine());
            System.out.println("Enter English marks");
            English = Integer.parseInt(br.readLine());
            System.out.println("Enter Hindi marks");
            Hindi = Integer.parseInt(br.readLine());
            System.out.println("Enter Maths marks");
            Maths = Integer.parseInt(br.readLine());
            System.out.println("Enter Science marks");
            Science = Integer.parseInt(br.readLine());
        }
    }
}
```

```
System.out.println ("Enter sst marks");
sst = Integer.parseInt(br.readLine());
totalmarks = English + Hindi + Maths + Science + sst;
percentage = totalmarks * 100 / maxmarks;
System.out.println ("Studentname" + studentname);
System.out.println ("Fathername" + Fathername);
System.out.println ("Mothername" + Mothername);
System.out.println ("maxmarks" + maxmarks);
System.out.println ("age" + age);
System.out.println ("English" + English);
System.out.println ("Hindi" + Hindi);
System.out.println ("Maths" + Maths);
System.out.println ("Science" + Science);
System.out.println ("sst" + sst);
System.out.println ("totalmarks" + totalmarks);
System.out.println ("percentage" + percentage);
if (percentage < 33)
{
    System.out.println ("Failed");
}
else
    if (percentage > 90)
    {
        System.out.println ("Student passed 1st div.");
    }
    else
        if (percentage > 80)
        {
            System.out.println ("Student passed 2nd div.");
        }
}
```

```
else
if (percentage > 70)
{
System.out.println ("Student passed 3rd div.");
}
else
{
System.out.println ("passed");
}
}
Catch (IOException ex)
{
System.out.println (" " + ex);
}
}
}
```

if else

Accept a number from user & check whether the number is even or odd.

```
import java.io.BufferedReader;
import java.io.IOException;
import java.io.InputStreamReader;
public class evennumber
{
    public static void main(String[] args)
    {
        BufferedReader br = new BufferedReader(new InputStreamReader(System.in));
        try
        {
            int num;
            System.out.println("Enter the number");
            num = Integer.parseInt(br.readLine());
            if (num % 2 == 0)
            {
                System.out.println("Number is even");
            }
            else
            {
                System.out.println("Number is odd");
            }
        }
        catch (IOException ex)
        {
            System.out.println(" " + ex);
        }
    }
}
```

Accept three numbers from user & check which number is greater

```
import java.io.BufferedReader;
import java.io.IOException;
import java.io.InputStreamReader;
public class check
{
    public static void main (String [] args)
    {
        BufferedReader br = new BufferedReader(new InputStreamReader(System.in));
        try
        {
            int a, b, c;
            System.out.println ("Enter the num");
            a = Integer.parseInt (br.readLine ());
            System.out.println ("Enter the num");
            b = Integer.parseInt (br.readLine ());
            System.out.println ("Enter the num");
            c = Integer.parseInt (br.readLine ());
            if (a > b & a > c)
            {
                System.out.println ("a is the greater number");
            }
            else
            {
                if (b > c)
                {
                    System.out.println ("b is the greater number");
                }
                else
                {
                    System.out.println ("c is the greater number");
                }
            }
        }
    }
}
```

```
}  
Catch ( IOException ex )
```

```
{  
    System.out.println (" " + ex );
```

```
}
```

```
}
```

```
}
```

Check the eligibility for vote.

```
import java.io.BufferedReader ;  
import java.io.IOException ;  
import java.io.InputStreamReader ;  
public class forvote  
{  
    public static void main (String [] args)  
{  
        BufferedReader br = new BufferedReader (new InputStreamReader (System.in));  
        try  
        {  
            String Nation ;  
            int age ;  
            System.out.print (" Enter your age ");  
            age = Integer.parseInt (br.readLine ());  
            System.out.print (" Enter your Nation ");  
            Nation = br.readLine ();  
            if (age >= 18 && Nation == " Indian ")  
            {  
                System.out.println (" you can vote ");  
            }  
        }
```

```
else
{
    System.out.println ("you can not vote");
}
}

Catch ( IOException ex )
{
    System.out.println (" " + ex);
}
}
}
```

switch Case Construct

Calculate the area of Circle accept radius from user

```
import java.io.*;
public class Area
{
    public static void main (String [] args) throws IOException
    {
        BufferedReader br = new BufferedReader (new InputStreamReader (System.in));
        int pi, area, radius;
        pi = (int) 3.14;
        System.out.println ('Enter the radius of a Circle');
        radius = Integer.parseInt (br.readLine ());
        area = (int) (3.14 * radius * radius);
        System.out.println ("area of Circle" + area);
    }
}
```

Accept Cost price & profit margin from user & find out the Selling price

```
import java.io.*;
public class sellingprice
{
    public static void main(String [] args) throws IOException
    {
        BufferedReader br = new BufferedReader(new InputStreamReader(System.in));
        double costprice, sellingprice, profitmargin;
        System.out.println ("Enter the cost price");
        costprice = Double.parseDouble(br.readLine());
        System.out.println ("Enter the profitmargin");
        profitmargin = Double.parseDouble(br.readLine());
        sellingprice = Costprice + Costprice / (profitmargin * 100);
        System.out.println ("Selling price " + sellingprice);
    }
}
```

Using • Scanner

Accept name from user & display it

```
import java.util.*;  
import java.util.*;  
public class Name  
{  
    public static void main (String [] args)  
    {  
        Scanner sc = new Scanner (System.in);  
        String name;  
        System.out.println ("Enter your name");  
        name = sc.nextLine();  
        System.out.println ("My name is " + name);  
    }  
}
```

Accept two numbers from user add it & display the result

```
import java.util.*;  
public class Add  
{  
    public static void main (String [] args)  
    {  
        Scanner sc = new Scanner (System.in);  
        int a, b, c;  
        System.out.println ("Enter the num");  
        a = sc.nextInt();
```

```

System.out.println ("Enter the num");
b = sc.nextInt
c = a+b;
System.out.println ("The result is " + c);
}
}

```

print the student marksheet using scanner

```

import java.util.*;
public class Studentmarksheet
{
    public static void main (String [] args) throws IOException
    {
        Scanner sc = new Scanner (System.in);
        String Name, Fathername, Mothername;
        int age, English, Hindi, Maths, Science, SST, maxmarks, totalmarks;
        double percentage;
        System.out.println ("Enter the Name");
        Name = sc.nextLine();
        System.out.println ("Enter Fathername");
        Fathername = sc.nextLine();
        System.out.println ("Enter Mothername");
        Mothername = sc.nextLine();
        System.out.println ("Enter age");
        age = sc.nextInt();
        System.out.println ("Enter English marks");
        English = sc.nextInt();
        System.out.println ("Enter Hindi marks");
        Hindi = sc.nextInt();
        System.out.println ("Enter Maths marks");
        Maths = sc.nextInt();
    }
}

```

```
System.out.println ("Enter science marks");
    Science = sc.nextInt();
System.out.println ("Enter SST marks");
    SST = sc.nextInt();
totalmarks = English + Hindi + Maths + Science + SST;
Enter System.out.println ("Enter maxmarks");
    maxmarks = sc.nextInt();
percentage = totalmarks * 100 / maxmarks;
System.out.println ("percentage" + percentage);
if (percentage < 33)
{
    System.out.println ("Failed")
}
else
    if (percentage > 90)
    {
        System.out.println ("Student passed 1st div.");
    }
    else
        if (percentage > 80)
        {
            System.out.println ("Student passed 2nd div.");
        }
        else
            if (percentage > 70)
            {
                System.out.println ("Student passed 3rd div");
            }
            else
                System.out.println ("Passed");
}
```

print details of the product & also calculate the total price of the product

```
import java.util.*;
public class pdetails
{
    public static void main (String [] aa)
    {
        Scanner sc = new Scanner (System.in);
        String productname;
        int productid, qty, price, totalprice;
        System.out.println ("Enter the productname");
        productname = sc.nextInt(), sc.nextLine();
        System.out.println ("Enter productid");
        productid = sc.nextInt();
        System.out.println ("Enter qty");
        qty = sc.nextInt();
        System.out.println ("Enter price");
        price = sc.nextInt();
        totalprice = qty * price;
        System.out.println ("totalprice" + totalprice);
    }
}
```

if else construct

Switch case

Case construct

```
import java.util.*;
public class Case
{
    public static void main (String [] aa)
    {
        Scanner sc = new Scanner (System.in);
        int op;
        System.out.println ("1. pen");
        System.out.println ("2. Bags");
        System.out.println ("3. Books");
        System.out.println ("choose any one item");
        op = sc.nextInt();
        switch (op)
        {
            Case 1:
                System.out.println ("you have selected item pen");
                break;
            Case 2:
                System.out.println ("you have selected item Bags");
                break;
            Case 3: ←
                System.out.println ("you have selected item Books");
                break;
            default:
                System.out.println ("you have selected wrong item");
        }
    }
}
```

Make a calculator using case construct

```
import java.util.*;
public class Calculator
{
    public static void main (String [] args)
    {
        Scanner sc = new Scanner (System.in);
        int ab;
        int num1, num2;
        double result;
        System.out.println ("Enter num1");
        num1 = sc.nextInt ();
        System.out.println ("Enter num2");
        num2 = sc.nextInt ();
        System.out.println ("1. + ");
        System.out.println ("2. - ");
        System.out.println ("3. * ");
        System.out.println ("4. / ");
        System.out.println ("choose anyone from it");
        ab = sc.nextInt ();
        switch (ab)
        {
            Case 1:
                result = num1 + num2;
                System.out.println ("addition of two num" + result);
                break;
            Case 2:
                result = num1 - num2;
                System.out.println ("Subtraction of two number" + result);
                break;
            Case 3:
                result = num1 * num2;
                System.out.println ("multiplication of two num" + result);
                break;
        }
    }
}
```

Case 4 :

result = num1 / num2

System.out.println ("div. of two num." + result);
break;

default :

System.out.println ("choose any one from special class");

}

}

}

```
import java.util.*;
public class Alpha
{
    public static void main (String [] args)
    {
        Scanner sc = new Scanner (System.in);
        Char a;
        System.out.println ("Enter the alphabet");
        a = sc.next().charAt(0);
        Switch (a)
        {
            Case 'A':
                System.out.println ("The alphabet is vowel");
                break;
            Case 'E':
                System.out.println ("The alphabet is vowel");
                break;
            Case 'I':
                System.out.println ("The alphabet is vowel");
                break;
            Case 'O':
                System.out.println ("The alphabet is vowel");
                break;
            Case 'U':
                System.out.println ("The alphabet is vowel");
                break;
        }
    }
}
```

Case 'A':

```
System.out.println ("The alphabet is vowel");  
break;
```

Case 'E':

```
System.out.println ("The alphabet is vowel");  
break;
```

Case 'I':

```
System.out.println ("The alphabet is vowel");  
break;
```

Case 'O':

```
System.out.println ("The alphabet is vowel");  
break;
```

Case 'U':

```
System.out.println ("The alphabet is vowel");  
break;
```

default:

```
System.out.println ("The alphabet is not a vowel");  
}
```

```
}
```

```
}
```

```
}
```

```
import java.util.*;
public class Days
{
    public static void main (String [] args)
    {
        Scanner sc = new Scanner (System.in);
        int an;
        System.out.println ("1. Sunday");
        System.out.println ("2. Monday");
        System.out.println ("3. Tuesday");
        System.out.println ("4. Wednesday");
        System.out.println ("5. Thursday");
        System.out.println ("6. Friday");
        System.out.println ("7. Saturday");
        System.out.println ("choose any one");
        an = sc.nextInt();
        switch (an)
    }
```

Case 1:

```
        System.out.println ("Today is Sunday");
        break;
```

Case 2:

```
        System.out.println ("Today is Monday");
        break;
```

Case 3:

```
        System.out.println ("Today is Tuesday");
        break;
```

Case 4 :

```
System.out.println ("Today is Wednesday");  
break;
```

Case 5 :

```
System.out.println ("Today is Thursday");  
break;
```

Case 6 :

```
System.out.println ("Today is Friday");  
break,
```

Case 7 :

```
System.out.println ("Today is Saturday");  
break;
```

default :

```
System.out.println ("Error plz try again");  
}  
}  
}
```

Restaurant

```
import java.util.*;
public class Restaurant
{
    public static void main (String [] aa)
    {
        Scanner sc = new Scanner (System.in);
        int op;
        String name;
        System.out.println ("Hi Sir/mdm");
        System.out.println ("Plz enter your Name.");
        name = sc.nextLine();
        System.out.println ("\n");
        System.out.println ("Welcome to My Restaurant");
        System.out.println ("\n");
        System.out.println ("1. Breakfast");
        System.out.println ("2. Lunch");
        System.out.println ("3. Dinner");
        System.out.println ("In Select Any Item");
        op = sc.nextInt();
        switch (op)
        {
            case 1:
                System.out.println ("you have selected Item: 1 Breakfast");
                System.out.println ("1. Tea : 1t 5 Rs.");
                System.out.println ("2. Samosa : 1t 6 Rs.");
                System.out.println ("3. Coffee : 1t 25 Rs.");
                System.out.println ("4. Kukure : 1t 10 Rs.");
                System.out.println ("Select Item:");
                int op1 = sc.nextInt();
                switch (op1)
                {
```

Case 1:

```
System.out.println ("Selected Item \t Tea");  
break;
```

Case 2:

```
System.out.println ("Selected Item \t Samosa");  
break;
```

Case 3:

```
System.out.println ("Selected Item \t Coffee");  
break
```

Case 4:

```
System.out.println ("Selected Item \t Kurkure");  
break;  
}
```

```
break;
```

Case 2 :

```
System.out.println ("you have selected \t Lunch");
```

```
System.out.println ("Plz Select Options \n 1. Veg \n 2. Non Veg");
```

```
int op2;
```

```
System.out.println ("Select Item");
```

```
op2 = sc.nextInt();
```

```
switch (op2)
```

```
{
```

Case 1:

```
System.out.println ("Selected Item \t Veg");
```

```
System.out.println ("1. Veg Biryani \t 30 Rs.");
```

```
System.out.println ("2. Matar Panner \t 80");
```

```
System.out.println ("3. Daal chawal \t 50");
```

```
System.out.println ("Select Options");
```

```
int op3 = sc.nextInt();
```

```
switch (op3)
```

```
{
```

Case 1:

```
System.out.println (" Selected Item Veg Biryani");  
System.out.println (" Plz pay 90 Rs. offline only");  
break;
```

Case 2 :

```
System.out.println (" Selected Item Matar Paneer");  
System.out.println (" Plz pay 80Rs. offline only");  
break;
```

Case 3:

```
System.out.println (" Selected Item Daal chawal");  
System.out.println (" Plz pay 50 Rs. offline only");  
break;  
}  
break;
```

Case 2:

```
System.out.println (" Selected Item ) + Non Veg");  
System.out.println (" 1. chicken Biryani ) + 150Rs.");  
System.out.println (" 2. Chicken Fry ) + 250Rs.");  
System.out.println (" 3. chicken Curry ) + 350Rs.");  
System.out.println (" Select option");  
int op1 = sc.nextInt();
```

```
switch (op1)
```

```
{
```

Case 1:

```
System.out.println (" Selected Item chicken Biryani");  
System.out.println (" Selected Item Plz Pay 150RS. offline only");  
break;
```

Case 2:

```
System.out.println (" Selected Item Chicken Fry");  
System.out.println (" Plz pay 250 Rs. offline only");  
break;
```

Case 3 :

```
System.out.println ("Selected item Chicken curvy");
System.out.println ("Plz pay 350 Rs offline only");
break;
}
break;
}
break;
```

Case 3 :

```
System.out.println ("you have selected 1t Dinner");
System.out.println ("Plz Select Options In 1. Veg In 2. Non veg");
int op6;
System.out.println ("Select Item");
op6 = sc.nextInt();
switch (op6)
{
```

Case 1 :

```
System.out.println ("Selected Item 1t veg");
System.out.println ("1. Manchurian 1t 90 Rs");
System.out.println ("2. Fry Rice 1t 80 Rs");
System.out.println ("3. Mushroom 1t 100 Rs");
System.out.println ("Select any");
int op7 = sc.nextInt();
switch (op7)
{
```

Case 1 :

```
System.out.println (" Selected Item Manchurian");
System.out.println ("Plz pay 90 Rs offline only");
break;
```

Case 2:

```
System.out.println (" Selected Item Ht & Fry Rice");  
System.out.println (" Plz Pay 80Rs offline only");  
break;
```

Case 3:

```
System.out.println (" Selected Item Egg Rice & Mushroom");  
System.out.println (" Plz Pay 100Rs offline only");  
break;  
}
```

break;

Case 2:

```
System.out.println (" Selected Item 1t Non Veg");  
System.out.println (" 1. Chicken Biriyani 1t 120Rs.");  
System.out.println (" 2. Chicken Fry 1t 250Rs");  
System.out.println (" 3. Chicken Curry 1t 350Rs");  
System.out.println (" select options");
```

```
int op8 = sc.nextInt();
```

```
switch (op8)
```

```
{
```

Case 1:

```
System.out.println (" Selected Item Chicken Biriyani");  
System.out.println (" Plz Pay 120 Rs. offline only");  
break;
```

Case 2:

```
System.out.println (" Selected Item Chicken Fry");  
System.out.println (" Plz Pay 250 Rs. offline only");  
break;
```

Case 3:

```
System.out.println (" Selected Item Chicken Curry");  
System.out.println (" Plz pay 350 Rs. offline only");  
break;  
}
```

```
break;  
}  
break;  
}  
System.out.println ("Thanks "+name);  
System.out.println (" Have a nice day");  
}  
}
```

loop

while loop

Print your name using while loop

Public class name

{

public static void main (String [] aa)

{

int a;

~~String~~ String name;

a = 0;

name = "Abhishek Mishra"

while (a < 2)

{

System.out.println ("My name is "+name);

a++;

}

}

}

^{white}
a loop

What is the difference b/w "when increment statement is ~~not~~ comes before print statement & after print statement

let's take an example

print a value from 0 to 5

Public class value

{

public static void main (String [] aa)

{

int a;

a = 0;

```
while (a < 5)
```

```
{
```

```
System.out.println(a);
```

```
a++;
```

II } Increment comes before print statement

```
Public class Value
```

```
{
```

```
Public static void main(String []aa)
```

```
{
```

```
int a =;
```

```
a = 0;
```

```
while (a < 5)
```

```
{
```

```
a++;
```

```
System.out.println(a);
```

```
}
```

Here we see in the first loop when increment statement comes after the print statement it gives exact value. but when increment comes before the print statement it gives one default value.

Print value from 1 to 100 in increasing & decreasing order

I → Increasing Order

```
Public class loop1to100
{
    Public static void main (String [] aa)
    {
        int a;
        a = 0;
        while (a < 101)
        {
            System.out.println (a);
            a++;
        }
    }
}
```

II → Decreasing order

```
Public class loop 100 to 1
{
    Public static void main (String [] aa)
    {
        int b;
        b = 100;
        while (b > 0)
        {
            System.out.println (b);
            b = b - 1;
        }
    }
}
```

Print the value from 1 to 50 & add it

```
public class loopsum  
{  
    public static void main (String []aa)  
{  
        int a, sum=0;  
        a = 0;  
        while (a < 50)  
        {  
            sum = sum + a  
            System.out.println ("Sum\t" + sum);  
            a++;  
        }  
    }  
}
```

Print the starting & ending point from user & ~~print~~
display the even numbers

```
import java.util.*;  
Public class userloop  
{  
    public static void main (String []aa)  
{  
        Scanner sc = new Scanner (System.in);  
        int s, e;  
        System.out.println ("Enter the starting point of the loop");  
        s = sc.nextInt();  
        System.out.println ("Enter the ending point of loop")  
        e = sc.nextInt();  
        while (s <= e)
```

```
{  
    if ( s % 2 == 0 )  
    {  
        System.out.println(s);  
    }  
    s++;  
}  
}  
}  
}
```

do while loop

Print a name using do while loop

```
public class Name  
{  
    public static void main (String []aa)  
    {  
        String name;  
        name = "Abhishek"  
        do  
        {  
            System.out.println (a);  
            a++;  
        }  
        while (a < 5);  
    }  
}
```

Print value using do while loop

```
public static class value
{
    public static void main (String [] aa)
    {
        int a;
        a = 0;
        do
        {
            System.out.println (a);
            a++;
        }
        while (a < 5)
    }
}
```

Accept a name from user & display it

```
import java.util.*;
public class name
{
    public static void main (String [] aa)
    {
        Scanner sc = new Scanner (System.in);
        int a; string name;
        a = 0;
        do
        {
            System.out.println ("enter your name");
            name = sc.nextLine();
            System.out.println ("My name is \t" + name);
            a++;
        }
    }
}
```

```
while (a < 5);  
}  
}
```

Cube of a number

```
import java.util.*;  
public class DoWhile  
{  
    public static void main (String [] aa)  
    {  
        Scanner sc = new Scanner (System.in);  
        char op;  
        do  
        {  
            int num, q;  
            System.out.println ("enter the num");  
            num = sc.nextInt ();  
            q = num * num * num;  
            System.out.println ("Cube of number is "+q);  
            System.out.println ("Are you want to continue press (Y/N)");  
            op = sc.next () .charAt (0);  
        }  
        while (op == 'Y' || op == 'y');  
    }  
}
```

Number in reverse order

```
import java.util.*;
public class Reverse
{
    public static void main (String [] aa)
    {
        Scanner sc = new Scanner (System.in);
        int num, rev = 0, r1;
        System.out.println ("enter the num greater than 10");
        num = sc.nextInt();
        if (num < 10)
        {
            System.out.println ("sorry! pls enter the number greater than 10");
        }
        else
        {
            while (num > 0)
            {
                r1 = num % 10;
                rev = rev * 10 + r1;
                num = num / 10;
            }
            System.out.println ("number in reverse order is " + rev);
        }
    }
}
```

Name in reverse order

```
import java.util.*;
public class nameReverse
{
    public static void main (System.in) (String [] aa)
    {
        Scanner sc = new Scanner (System.in);
        String name;
        System.out.println ("enter your name");
        name = sc.nextLine();
        String str = new StringBuffer (name).reverse().toString();
        System.out.println ("name\t" + str);
    }
}
```

palindrome of a number

```
import java.util.*;
public class palindrome
{
    public static void main (String [] aa)
    {
        Scanner sc = new Scanner (System.in);
        int num, rev = 0, r1;
        System.out.println ("Enter the num greater than 10");
        num = sc.nextInt();
        int p;
        p = sumnum;
        while (num > 0)
        {
            r1 = num % 10;
            rev = rev * 10 + r1;
            num = num / 10;
        }
        if (p == rev)
        {
            System.out.println ("number is pallindrom");
        }
        else
        {
            System.out.println ("number is not pallindrom");
        }
    }
}
```

Pallindrom of word

```
import java.util.*;
public class Pallindromword
{
    public static void main(String [] aa)
    {
        Scanner sc = new Scanner (System.in);
        String name;
        System.out.println ("Enter the name");
        name = sc.nextLine ();
        String str = new StringBuffer (name).reverse().toString();
        String d;
        d = name;
        if (str == null ? name == null : str.equals (name))
        {
            System.out.println ("word is pallindrom");
        }
        else
        {
            System.out.println ("word is not pallindrom");
        }
    }
}
```

for loop

print the value from 1 to 10

```
public class for1to10
{
    public static void main (String [] args)
    {
        for (int i=1; i<11; i++)
        {
            System.out.println (i);
        }
    }
}
```

Control the loop using break & continue

break

```
public class for
{
    public static void main (String [] args)
    {
        for (int i=1; i<11; i++)
        {
            if (i==7)
            {
                break;
            }
            System.out.println (i);
        }
    }
}
```

Continue

```
public class for
{
    public static void main (String [] aa)
    {
        for (int i=1; i<11; i++)
        {
            if (i==7)
            {
                Continue;
            }
            System.out.println (i);
        }
    }
}
```

Accept a num from user & print the table

```
import java.util.*;
public class table
{
    public static void main (String [] aa)
    {
        Scanner sc = new Scanner (System.in);
        int num;
        System.out.println (" Enter the num");
        num = sc.nextInt();
        for (int a=1; a<=10; a++)
        {
            System.out.println (num+" * "+a+" = "+num*a);
        }
    }
}
```

Array → (Single dimensional array)

```
public class array  
{  
    public static void main (String [] args)  
{  
        int a [] = { 34, 67, 66, 54, 43, 61, 81, 88 };  
        for (int i=0; i<8; i++)  
    }
```

```
System.out.println ("value stored in " + i + " index= " + a[i]);  
}  
}
```

Input array

print the array value from user & display it

```
public class Inputarray
```

```
{
```

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

```
{
```

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

```
int a [] = new int [10];
```

```
for (int e=0; e<10; e++)
```

```
{
```

```
System.out.println ("Enter the value of "+e+" index");
```

```
a [e] = sc.nextInt();
```

```
}
```

```
for (int i=0; i<10; i++)
```

```
{
```

```
System.out.println ("Values stored in "+i+" index "+a[i]);
```

```
}
```

```
}
```

```
}
```

array size from user display the sum & average

```
import java.util.*;
```

```
public class Userarray
```

```
{
```

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

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

```
int sum=0;
```

```
double avg;
```

```
System.out.println ("Enter the array size");
```

```
int size = sc.nextInt();
```

```
int arr [ ] = new int [size];
for ( int i=0; i<size; i++)
{
    System.out.println ("enter the value of array \t"+i+" index");
    arr [i] = sc.nextInt ();
    sum = sum + arr[i];
}
avg = sum / size;
System.out.println ("sum "+sum);
System.out.println ("average of array "+ average );
}
```

Multidimensional array

```
public class multisArray
```

```
{
```

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

```
{
```

```
int [] [] a = new int [2] [2];
```

```
a [0] [0] = 4;              a [0] [1] = 10;
```

```
a [1] [0] = 29;            a [1] [1] = 1;
```

```
for (int i=0 ; i<2 ; i++)
```

```
for (int j=0 ; j<2 ; j++)
```

```
{ System.out.println ("value stored "+ i+ " " +st "index"+ a[i][j]);
```

```
}
```

```
}
```

```
}
```

for loop

Print a Δ using multiplication sign

```
public class starttriangle  
{  
    public static void main (String [] args)  
    {  
        int i, j, k;  
        for (i=1; i<=5; i++)  
        {  
            for (j=1; j>=i; j--)  
            {  
                System.out.print (" ");  
            }  
            for (k=1; k<=(2*i-1); k++)  
            {  
                System.out.print ("*");  
            }  
            System.out.println ();  
        }  
    }  
}
```

```
public class Star
{
    public static void main (String [] args)
    {
        int i, j, k;
        for (i=1; i<=5; i++)
        {
            for (j=i; j<5; j++)
            {
                System.out.print (" ");
            }
            for (k=1; k<(i*2); k++)
            {
                System.out.print ("*");
            }
            System.out.println ();
        }
        for (i=4; i>=1; i--)
        {
            for (j=5; j>i; j--)
            {
                System.out.print (" ");
            }
            for (k=1; k<(i*2); k++)
            {
                System.out.print ("*");
            }
            System.out.println ();
        }
    }
}
```

Creating file in java

```
import java.io.*;
public class FileDemo
{
    public static void main (String [] args)
    {
        try
        {
            File ff = new File ("ab.mp3");
            if (ff.createNewFile () == true)
            {
                System.out.println ("file created");
            }
            else
            {
                System.out.println ("file already exist");
            }
        }
        catch (IOException ex)
        {
            System.out.println (ex.getMessage ());
        }
    }
}
```

printing a Δ from star

```
public class Startriangle
{
    public static void main (String [] args)
    {
        int i, j, k;
        for (i=1; i<=5; i++)
        {
            for (j=4; j>=i; j--)
            {
                System.out.println (" ");
            }
            for (k=1; k<=(2*i-1); k++)
            {
                System.out.println ("*");
            }
            System.out.println (" ");
        }
    }
}
```

program of User multidimensional array

```
public class Usermultidimarray
{
    public static void main (String[] args)
    {
        int [] [] a = new int [3] [3];
        Scanner sc = new System.Scanner (System.in);
        for (int i=0; i<3; i++)
        for (int j=0; j<3; j++)
        {
            System.out.println ("enter value of array \t" + i + " " + j);
            a [i] [j] = sc.nextInt();
        }
        for (int i=0; i<3; i++)
        for (int j=0; j<3; j++)
        {
            System.out.println ("value stored in \t" + i + " " + j + " index " + a [i] [j]);
        }
    }
}
```

```
import java.io.BufferedReader;
import java.io.IOException;
import java.io.InputStreamReader;
public class Username
{
    public static void main (String[] args)
    {
        BufferedReader br = new BufferedReader(new InputStreamReader(System.in));
        try
        {
            String name;
            System.out.println ("enter your name");
            name = br.readLine();
            System.out.println ("My name is \t " + name);
        }
        catch ( IOException ex )
        {
            System.out.println (" " + ex);
        }
    }
}
```

Program of Matrix

```
import java.util.*;  
public class Matrixarray  
{  
    public static void main (String [] args)  
    {  
        Scanner sc = new Scanner (System.in);  
        int r1, cc;  
        System.out.println ("enter the value of row");  
        r1 = sc.nextInt();  
        System.out.println ("enter the array column");  
        cc = sc.nextInt();  
        int a[][] = new int [r1][cc];  
        int b[][] = new int [r1][cc];  
        int res[][] = new int [r1][cc];  
        for (int i=0; i<r1; i++)  
        for (int j=0; j<cc; j++)  
        {  
            System.out.println ("enter the value "+i+" "+j+" index");  
            a[i][j] = sc.nextInt();  
        }  
        for (int i=0; i<r1; i++)  
        for (int j=0; j<cc; j++)  
        {  
            System.out.println ("enter the value "+i+" "+j+" index");  
            b[i][j] = sc.nextInt();  
        }  
        for (int i=0; i<r1; i++)  
        for (int j=0; j<cc; j++)
```

```
{  
    System.out.println ("enter the value " + i + " " + j + " index");  
    res[i][j] = a[i][j] + b[i][j];  
}  
for (int i=0; i<n; i++)  
for (int j=0; j<cc; j++)  
{  
    System.out.println ("res" + res[i][j]);  
}  
}  
}
```

function

When you start writing real programs, however, you'll quickly find that they can grow to many pages of code. When programs get long, they also get harder to organize & read. To overcome this problem, professional programmers break their programs down into individual functions, each of which completes a specific & well-defined task.

Program related to function

```
public class Multifun
{
    public void lengthdemo()
    {
        String a = "Abhishek Mishra";
        int len = a.length();
        System.out.println ("The output of given is " + len);
    }

    public void chardemo()
    {
        String s = "Anurag";
        char result = s.charAt(4);
        System.out.println ("The output of given char is " + result);
    }

    public void voiddemo()
    {
        String c = "Welcome to my place";
        char [] d = new char [6];
        c.getChars(8, 10, d, 0);
        System.out.println ("Value copied = ");
        System.out.println (d);
    }

    public void booleandemo()
    {
        String e = "Abhishek";
        String f = "Anurag";
```

```
boolean result = e.equals(f);
System.out.println ("output of boolean is " + result);
}
public void comparedemo()
{
    String q = "Smart";
    String g = "Smart boy";
    int result = q.compareTo(g);
    System.out.println(result);
}
public void booldemo()
{
    String y = "welcome back to home";
    System.out.println ("value returned");
    System.out.println (y.startsWith("Welcome"));
}
public void booldemo()
{
    String st = "Welcome back";
    System.out.println ("value returned:");
    System.out.println (st.endsWith("back"));
}
public void lastindex()
{
    String str = "welcome to java";
    System.out.println ("last Index found at:");
    System.out.println (str.lastIndexOf ('t'));
}
public void substring()
{
    String ft = "welcome to my program";
    System.out.println ("value returned");
    System.out.println (ft.substring(10));
}
```

```
public void concatdemo()
{
    String s1 = "Hello ";
    String s2 = " Everyone";
    System.out.println (s1.concat(s2));
}

public void replacedemo()
{
    String x = "Welcome boy";
    System.out.println ("value returned:");
    System.out.println (x.replace ('m', 'o'));
}

public void upperdemo()
{
    String as = " Welcome to heaven";
    System.out.println ("Value returned");
    System.out.println (as.toUpperCase());
}

public void lowerdemol()
{
    String at = " Welcome to Hell";
    System.out.println (" Value returned");
    System.out.println (at.toLowerCase());
}

public void trimdemo()
{
    String tu = " welcome to gulabjamun";
    System.out.println ("Value returned:");
    System.out.println (tu.trim());
}
```

```
public void chararray()
{
    String tr = "welcome to singhbunzer";
    System.out.println ("value returned");
    char ch [] = tr.toCharArray();
    System.out.println (ch);
}

public void valuedemo()
{
    int a = 15;
    double b = 3.00;
    char [] arr = {'a', 'b'};
    System.out.println ("return value :" + String.valueOf (a));
    System.out.println ("return value :" + String.valueOf (b));
}

public void booleandemo()
{
    String at = "SKYBAGS";
    String ab = "NIKE";
    System.out.println ("return = " + at.equalsIgnoreCase (ab));
}

public void builderdemo ()
{
    StringBuilder sb = new StringBuilder ("Biryani");
    sb.append (" are good for health");
    System.out.println (sb);
}

public void builddemo ()
{
    StringBuilder str = new StringBuilder ("biryani are good for health");
    str.delete (9, 18);
    System.out.println ("After deletion = " + str);
}
```

```

public void buildinsert()
{
    StringBuilde str = new StringBuilde ("Biniyanigood");
    str.insert (8, "are");
    System.out.println ("After Insertion = ");
    System.out.println (str.toString());
}

public void buildreverse()
{
    StringBuilde str = new StringBuilde ("Dumbiniyani");
    System.out.println ("reverse = " + str.reverse());
}

public static void main (String [] args)
{
    Multifun abh = new Multifun();
    abh.lengthdemo();
    abh.chardemo();
    abh.voiddemo();
    abh.boolandemo();
    abh.comparedemo();
    abh.booldemo();
    abh.booldemo();
    abh.indexdemo();
    abh.lastindex();
    abh.substring();
    abh.concatdemo();
    abh.replacedemo();
    abh.upperdemo();
    abh.lowerdemo();
    abh.trimdemo();
    abh.chararray();
    abh.valuedemo();
    abh.boolandemod ();
    abh.buildeDemo();
}

```

```
abt. builddemo();  
abt. builddinsert();  
abt. builddreverse();  
}  
}  
,,
```

Convert a Number Decimal System to Binary System

```
import java.util.Scanner;  
public class Convert  
{  
    public static void main(String[] args)  
    {  
        int n;  
        String k;  
        Scanner sc = new Scanner(System.in);  
        System.out.println("Enter any Decimal Number : ");  
        n = sc.nextInt();  
  
        Convert obj = new Convert();  
        k = obj.binary(n);  
        System.out.println("Binary Number : " + k);  
    }  
  
    String binary(int y)  
    {  
        int a;  
        if (y > 0)  
        {  
            . . .  
        }  
    }  
}
```

```
a = y % 2;  
return (binary(y/2) + " " + a);  
}  
return "";  
}  
}
```

Half Triangle

```
public class Halftriangle  
{  
public static void main (String [] args)  
{  
int x, y;  
for (x=1; x<10; x++)  
{  
for (y=1; y<=x; y++)  
{  
System.out.print (*);  
}  
System.out.println ();  
}  
}  
}
```