**Java**

Java is a popular programming language, created in 1995.

 Java is an [object-oriented](https://www.javatpoint.com/java-oops-concepts), class-based, concurrent, secured and general-purpose computer-programming language. It is a widely used robust technology.

ava is a **programming language** and a **platform**. Java is a high level, robust, object-oriented and secure programming language.

A list of the most important features of the Java language is given below.



Data types are divided into two groups:

* Primitive data types - includes byte, short, int, long, float, double, boolean and char

|  |  |  |
| --- | --- | --- |
| **Data Type** | **Size** | **Description** |
| **byte** | **1 byte** | **Stores whole numbers from -128 to 127** |
| **short** | **2 bytes** | **Stores whole numbers from -32,768 to 32,767** |
| **int** | **4 bytes** | **Stores whole numbers from -2,147,483,648 to 2,147,483,647** |
| **long** | **8 bytes** | **Stores whole numbers from -9,223,372,036,854,775,808 to 9,223,372,036,854,775,807** |
| **float** | **4 bytes** | **Stores fractional numbers. Sufficient for storing 6 to 7 decimal digits** |
| **double** | **8 bytes** | **Stores fractional numbers. Sufficient for storing 15 decimal digits** |
| **boolean** | **1 bit** | **Stores true or false values** |
| **char** | **2 bytes** | **Stores a single character/letter or ASCII values** |

**1)HELLO JAVA Program**

**package** javavar;

**public** **class** JavaPrint {

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

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

System.***out***.println("java");

}  
}

OUTPUT:-

hello

java

**2)Addtition:-**

**package** javavar;

**public** **class** Addition {

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

**int** a = 10;

**int** b = 20;

**int** add= a + b;

System.***out***.println(add); // Print the addition

}

}

OUTPUT:-

30

**3)NUM**

**package** javavar;

**public** **class** MYNUM {

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

**int** myNum;

myNum = 10;

System.***out***.println(myNum);

}

}

OUTPUT:-

10

**4) MULTPLE VARAIBLE**

**package** javavar;

**public** **class** MultipleVaraible {

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

**int** x = 5, y = 6, z = 50;

System.***out***.println(x + y + z);

**int** a, b, c;

a = b = c = 50;

System.***out***.println(a + b + c);

}

}

OUTPUT:-

61

150

**5)DATA TYPE**

**package** javavar;

**public** **class** DataType {

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

**byte** byte1 = 100;

System.***out***.println(myNum);

**short** myNum = 5000;

System.***out***.println(myNum);

**int** myNum = 100000;

System.***out***.println(myNum);

**long** myNum = 15000000000L;

System.***out***.println(myNum);

**float** myNum = 5.75f;

System.***out***.println(myNum);

**double** myNum = 19.99d;

System.***out***.println(myNum);

**char** rijj = 'a';

System.***out***.println(rijj);

String greeting = "Hello World";

System.***out***.println(greeting);

**char** myVar1 = 82, myVar2 = 83, myVar3 = 87;

System.***out***.println(myVar1);

System.***out***.println(myVar2);

System.***out***.println(myVar3);

}

}

OUTPUT:-

100

5000

150000000L

5.75f

19.99d

A

hello world

R

S

W

**Operator:-**

**Operator** in [Java](https://www.javatpoint.com/java-tutorial) is a symbol that is used to perform operations. For example: +, -, \*, / etc.

There are many types of operators in Java which are given below:

* Unary Operator,
* Arithmetic Operator,
* Shift Operator,
* Relational Operator,
* Bitwise Operator,
* Logical Operator,
* Ternary Operator and
* Assignment Operator.

**6)Unary operator**

* **package** javavar;
* **public** **class** OperatorExample{
* **public** **static** **void** main(String args[]){
* **int** x=10;
* System.***out***.println(x++);//10 (11)
* System.***out***.println(++x);//12
* System.***out***.println(x--);//12 (11)
* System.***out***.println(--x);//10
* }}

OP-10

12

12

10

10

**7)Arithmatic operator:-**

**package** javavar;

**public** **class** Main {

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

**int** x = 5;

x += 3;

System.***out***.println(x);

}

}

Op- 8

8)Add**-**

**package** javavar;

**public** **class** Main1 {

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

**int** x = 5;

x &= 8;

System.***out***.println(x);

}

}

Op-0

**9)OR-**

**package** javavar;

**public** **class** Main2 {

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

**int** x = 5;

x |= 3;

System.***out***.println(x);

}

}

Op-7

**10)Left Shift**

**package** javavar;

**public** **class** Main3 {

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

**int** x = 5;

x <<= 3;

System.***out***.println(x);

}

}

Op-40

conditional statements:-

**11)IF THEN-**

**package** javavar;

**public** **class** IFelse {

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

**if** (20 > 18) {

System.***out***.println("20 is greater than 18"); // obviously

}

}

}

op- 20 is greater than 18.

**12)IF ELSE-**

**package** javavar;

**public** **class** Else {

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

**int** num=10;;

**if** (num < 18) {

System.***out***.println("true.");

} **else** {

System.***out***.println("flase.");

}

}

}

Op- true

**13)IF ELSE IF ELSE-**

**package** javavar;

**public** **class** Elseelse {

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

**int** time = 22;

**if** (time < 10) {

System.***out***.println("Good morning.");

} **else** **if** (time < 20) {

System.***out***.println("Good day.");

} **else** {

System.***out***.println("Good evening.");

}

}

}

Op-Good evening

**14)Array:**

**Collection of similar type of element.**

**package** javavar;

**public** **class** Array {

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

**int** [] mark = {89, 90, 91, 92};

mark[3]=87;

System.***out***.println(mark[3]);

System.***out***.println(mark.length);

**for**(**int** i = 0; i < mark.length; i++)

{

System.***out***.println(mark[i]);

}

**for** (**int** i : mark) {

System.***out***.println(i);

}

}

}

**Output:-**

**87**

**4**

**89**

**90**

**91**

**87**

**89**

**90**

**91**

**87**

**15)Assignmnet operator:-**

**package** javavar;

**public** **class** Assign {

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

**int** a=10;

**int** b=5;

System.***out***.println(a+b);//15

System.***out***.println(a-b);//5

System.***out***.println(a\*b);//50

System.***out***.println(a/b);//2

System.***out***.println(a%b);//0

}

}

**Output:**

**15**

**5**

**50**

**2**

**0**

**16)Break:-**

**package** javavar;

**public** **class** Break {

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

**for** (**int** i = 0; i < 10; i++) {

**if** (i == 2) {

**break**;

}

System.***out***.println(i);

}

}

}

**Output:-**

**0**

**1**

**17)Calendar:-**

**package** javavar;

**public** **class** Cal {

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

String[]month= {"January"};

String[]Day= {"Mon","Tue","Wed","Thur","Fri","Sat","Sun"};

**for**(**int** i=0;i<=1;i++)

{

System.***out***.println("Month:::"+month[i]);

**for**(**int** j=1;j<=4;j++) {

System.***out***.println("Week:"+j);

**for**(String d:Day) {

System.***out***.println(d);

}

}

}

}

}

**Op-**

**Month:::January**

**Week:1**

**Mon**

**Tue**

**Wed**

**Thur**

**Fri**

**Sat**

**Sun**

**Week:2**

**Mon**

**Tue**

**Wed**

**Thur**

**Fri**

**Sat**

**Sun**

**Week:3**

**Mon**

**Tue**

**Wed**

**Thur**

**Fri**

**Sat**

**Sun**

**Week:4**

**Mon**

**Tue**

**Wed**

**Thur**

**Fri**

**Sat**

**Sun**

**18)Collection Vector-**

**package** javavar;

**import** java.util.\*;

**public** **class** CollectionVector {

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

Vector<String> v=**new** Vector<String>();

v.add("Capgemini");

v.add("TCS");

v.add("Accenture");

Iterator<String> itr=v.iterator();

**while**(itr.hasNext()){

System.***out***.println(itr.next());

}

}

}

**Op-**

**Capgemini**

**TCS**

**Accenture**

**19)Continue Loop-**

**package** javavar;

**public** **class** Continue {

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

**for** (**int** i = 0; i < 1; i++) {

**if** (i == 6)

{

**continue**;

}

System.***out***.println(i);

}

}

}

**Op-**

**0**

**20)count\_Occurance-**

**package** javavar;

**import** java.util.Scanner;

**public** **class** Count\_Occurrence

{

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

{

**int** n, x, count = 0, i = 0;

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

System.***out***.print("Enter no. of elements you want in array:");

n = s.nextInt();

**int** a[] = **new** **int**[n];

System.***out***.println("Enter all the elements:");

**for**(i = 0; i < n; i++)

{

a[i] = s.nextInt();

}

System.***out***.print("Enter the element of which you want to count number of occurrences:");

x = s.nextInt();

**for**(i = 0; i < n; i++)

{

**if**(a[i] == x)

{

count++;

}

}

System.***out***.println("Number of Occurrence of the Element:"+count);

}

}

**Op-**

**Enter no. of elements you want in array:**

**6**

**Enter all the elements:**

**1**

**4**

**5**

**3**

**2**

**10**

**Enter the element of which you want to count number of occurrences:1**

**Number of Occurrence of the Element:1**

**21)Create Method-**

**package** javavar;

**public** **class** Create {

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

Methodjava e1=**new** Methodjava(); // create a object of Methodjava class

e1.myMethod(); // call myMethod() method

e1.easy(); // call easy() method

e1.*sub*(5,3); // call sub() method

}

}

**Op-**

**This is java method programm**

**It is Very Easy to perfrom**

**subtraction:2**

**22)Create Object-**

**package** javavar;

**public** **class** CreateO {

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

AnotherM a1=**new** AnotherM(); // create object of AnotheM class

a1.*add*(9, 1); //call add() method

a1.*mul*(2,4); // call mul() method

a1.*div*(4, 6); // call div() method

}

}

**Op-**

**addition:10**

**Multiplication:8**

**division:0**

**23)Custructor-**

**package** javavar;

**public** **class** Custructeor {

**int** x; // Create a class attribute

// Create a class constructor for the Main class

**public** Custructeor() {

x=9;// Set the initial value for the class attribute x

}

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

Custructeor myObj = **new** Custructeor(); // Create an object of class Main (This will call the constructor)

System.***out***.println(myObj.x); // Print the value of x

}

}

**Op-**

**9**

**24)Default Constructor-**

**package** javavar;

**public** **class** Default {

**int** a;

**boolean** b;

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

// A default constructor is called

Default obj = **new** Default();

System.***out***.println("Default Value:");

System.***out***.println("a = " + obj.a);

System.***out***.println("b = " + obj.b);

}

}

**Op-**

**Default Value:**

**a = 0**

**b = false**

**25)Do-while loop-**

**package** javavar;

**public** **class** Dowhile {

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

**int** i = 0;

**do** {

System.***out***.println(i);

i++;

}

**while** (i < 1);

}

}

**Op-**

**0**

**26)Deque-**

**package** javavar;

**import** java.util.\*;

**public** **class** DQ {

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

//Creating Deque and adding elements

Deque<String> deque = **new** ArrayDeque<String>();

deque.add("mango");

deque.add("kivi");

deque.add("Apple");

//Traversing elements

**for** (String str : deque) {

System.***out***.println(str);

}

}

}

**Op-**

**mango**

**kivi**

**Apple**

**27)Else-**

**package** javavar;

**public** **class** Else {

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

**int** num=10;;

**if** (num < 18) {

System.***out***.println("true.");

} **else** {

System.***out***.println("flase.");

}

}

}

**Op-true.**

**28)Else another else-**

**package** javavar;

**public** **class** Elseelse {

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

**int** time = 22;

**if** (time < 10) {

System.***out***.println("Good morning.");

} **else** **if** (time < 20) {

System.***out***.println("Good day.");

} **else** {

System.***out***.println("Good evening.");

}

}

}

**Op-**

**Good evening**

**28)Exception-**

**package** javavar;

**public** **class** Exaceptionpgm {

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

**try** {

**int**[] myNumbers = {1, 2, 3};

System.***out***.println(myNumbers[10]);

} **catch** (Exception e) {

System.***out***.println("Something went wrong.");

} **finally** {

System.***out***.println("The 'try catch' is finished.");

}

}

}

**Op-**

**Something went wrong.**

**The 'try catch' is finished.**

**29)Equality Checking of two array-**

**package** javavar;

**public** **class** Exercise23 {

**static** **void** equality\_checking\_two\_arrays(**int**[] my\_array1, **int**[] my\_array2)

{

**boolean** equalOrNot = **true**;

**if**(my\_array1.length == my\_array2.length)

{

**for** (**int** i = 0; i < my\_array1.length; i++)

{

**if**(my\_array1[i] != my\_array2[i])

{

equalOrNot = **false**;

}

}

}

**else**

{

equalOrNot = **false**;

}

**if** (equalOrNot)

{

System.***out***.println("Two arrays are equal.");

}

**else**

{

System.***out***.println("Two arrays are not equal.");

}

}

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

{

**int**[] array1 = {2, 5, 7, 9, 11};

**int**[] array2 = {2, 5, 7, 8, 11};

**int**[] array3 = {2, 5, 7, 9, 11};

*equality\_checking\_two\_arrays*(array1, array2);

*equality\_checking\_two\_arrays*(array1, array3);

}

}

**Op-**

**Two arrays are not equal.**

**Two arrays are equal.**

**30)Arraylist-**

package javavar;

import java.util.ArrayList;

import java.util.Arrays;

public class Exercise29 {

public static void main(String[] args)

{

String[] my\_array = new String[] {"Rijwana", "usha", "anjli", "roshni", "myuri", "chatu"};

ArrayList<String> list = new ArrayList<String>(Arrays.asList(my\_array));

System.out.println(list);

}

}

**Op-**

**[Rijwana, usha, anjli, roshni, myuri, chatu]**

**31)Find dublicate element-**

**package** javavar;

**public** **class** FindDuplicateElements {

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

**int**[] array = **new** **int**[]{2, 4, 7, 2, 11, 5, 7, 14, 22, 11, 49, 58, 14, 101, 1, 3, 205, 49, 101, 12};

**for** (**int** i = 0; i < array.length; i++) { // outer loop

**for** (**int** j = i + 1; j < array.length; j++) { // inner loop

**if** (i != j && array[i] == array[j]) {

System.***out***.println("Duplicate element found:" + array[i]);

}

}

}

}

}

**Op-**

**Duplicate element found:2**

**Duplicate element found:7**

**Duplicate element found:11**

**Duplicate element found:14**

**Duplicate element found:49**

**Duplicate element found:101**

**32)Foreach-**

**package** javavar;

**public** **class** FOREACH {

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

String[] name = {"rijwana", "usha", "anjli", "mayuri"};

**for** (String i : name) {

System.***out***.println(i);

}

}

}

**Op-**

**usha**

**anjli**

**mayuri**

**33)ForLoop-**

**package** javavar;

**public** **class** Forlopp {

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

**for** (**int** i = 0; i < 9; i++) {

System.***out***.println(i);

}

}

}

**Op-**

**0**

**1**

**2**

**3**

**4**

**5**

**6**

**7**

**8**

**34)Hashset-**

**package** javavar;

**import** java.util.\*;

**public** **class** Hashset {

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

//Creating HashSet and adding elements

HashSet<String> set=**new** HashSet<String>();

set.add("blue");

set.add("black");

set.add("Red");

set.add("pink");

//Traversing elements

Iterator<String> itr=set.iterator();

**while**(itr.hasNext()){

System.***out***.println(itr.next());

}

}

}

**Op-**

**pink**

**blue**

**black**

**35)If-Else-Ladder-**

**package** javavar;

**public** **class** IFelse {

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

**if** (20 > 18) {

System.***out***.println("20 is greater than 18"); // obviously

}

}

}

**Op-**

**20 is greater than 18**

**36)InputUser-**

**package** javavar;

**import** java.util.\*;

**class** InputUser

{

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

{

Scanner sc= **new** Scanner(System.***in***);//System.in is a standard input stream

/\*System.out.print("Enter a string: ");

String str= sc.nextLine(); //reads string

System.out.print("str: "+str);

System.out.print("Enter first number- ");

int a= sc.nextInt();

System.out.print("Enter second number- ");

int b= sc.nextInt();

System.out.print("Enter third number- ");

int c= sc.nextInt();

int d=a+b+c;

System.out.println("Total= " +d);

}

}\*/

System.***out***.println("Enter name, age and salary:");

// String input

String name = sc.nextLine();

// Numerical input

**int** age = sc.nextInt();

**double** salary = sc.nextDouble();

// Output input by user

System.***out***.println("Name: " + name);

System.***out***.println("Age: " + age);

System.***out***.println("Salary: " + salary);

}

}

**Op-**

**Enter name, age and salary:**

**rijwana**

**25**

**20000**

**Name: rijwana**

**Age: 25**

**Salary: 20000.0**

**37)Insertion of two array-**

**package** javavar;

**public** **class** IntersectionOfTwoArrays {

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

**int** myArray1[] = {23, 36, 96, 78, 55};

**int** myArray2[] = {78, 45, 19, 73, 55};

System.***out***.println("Intersection of the two arrays ::");

**for**(**int** i = 0; i<myArray1.length; i++ ) {

**for**(**int** j = 0; j<myArray2.length; j++) {

**if**(myArray1[i]==myArray2[j]) {

System.***out***.println(myArray2[j]);

}

}

}

}

}

**Op-**

**Intersection of the two arrays ::**

**78**

**55**

**38)Java Calendr-**

**package** javavar;

**import** java.util.Calendar;

**public** **class** Java {

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

//create Calendar instance

Calendar now = Calendar.*getInstance*();

System.***out***.println("Current date : " + (now.get(Calendar.***MONTH***) + 1)

+ "-"

+ now.get(Calendar.***DATE***)

+ "-"

+ now.get(Calendar.***YEAR***));

//create an array of days

String[] strDays = **new** String[]{

"Sunday",

"Monday",

"Tuesday",

"Wednesday",

"Thusday",

"Friday",

"Saturday"

};

System.***out***.println("Current day is : " +

strDays[now.get(Calendar.***DAY\_OF\_WEEK***) - 1]

);

}

}

**Op-**

**Current date : 1-15-2023**

**Current day is : Sunday**

**39)Java Print-**

**package** javavar;

**public** **class** JavaPrint {

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

// **TODO** Auto-generated method stub

System.***out***.println("rijwana");

System.***out***.println("shaikh");

/\*int a = 10;

int b = 20;

int add= a + b;

System.out.println(add); // Print the addition

int myNum;

myNum = 15;

a=8;

System.out.println(myNum);

System.out.println(a);\*/

}

}

**Op-**

**rijwana**

**shaikh**

**40)java number-**

**package** javavar;

**public** **class** JMYNUM {

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

**int** a=13;

a=34;

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

}

}

**Op-**

**34**

**41)Linkedhash-**

**package** javavar;

**import** java.util.\*;

**public** **class** Linkedhash {

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

LinkedHashSet<String> set=**new** LinkedHashSet<String>();

set.add("kedarnath");

set.add("shershah");

set.add("vivah");

set.add("bajrangibhaijaan");

Iterator<String> itr=set.iterator();

**while**(itr.hasNext()){

System.***out***.println(itr.next());

}

}

}

**Op-**shershah

vivah

bajrangibhaijaan

**42)LinkedList-**

**package** javavar;

**import** java.util.\*;

**public** **class** Linkedlist {

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

LinkedList<String> al=**new** LinkedList<String>();

al.add("Rijwana");

al.add("Adam");

al.add("Shaikh");

Iterator<String> itr=al.iterator();

**while**(itr.hasNext()){

System.***out***.println(itr.next());

}

}

}

**Op-**

Rijwana

Adam

Shaikh

**43)List-**

**package** javavar;

**import** java.util.\*;

**class** List{

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

ArrayList<String> list=**new** ArrayList<String>();//Creating arraylist

list.add("Rose");//Adding object in arraylist

list.add("lotus");

list.add("Orchi");

//Traversing list through Iterator

Iterator itr=list.iterator();

**while**(itr.hasNext()){

System.***out***.println(itr.next());

}

}

}

**Op-**

Rose

lotus

Orchi

**44)method-**

**package** javavar;

**public** **class** M {

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

String [] name = {"usha", "riju", "anjli"};

String [] surname = {"bansode", "shaikh", "samla"};

System.***out***.println(name[2]);

System.***out***.println(name.length);

**for**(**int** i = 0; i < name.length; i++)

{

System.***out***.println(name[i]);

}

/\* for (int i : mark) {

System.out.println(i);

} \*/

}

}

**Op-**

usha

riju

anjli

**45)Subtraction test-**

**package** javavar;

**class** SubtractionTest {

**public** **void** subtraction(**int** num1, **int** num2) {

System.***out***.println(num1 - num2);

}

**public** **void** subtraction(**int** num1, **int** num2, **int** num3) {

System.***out***.println(num1 - num2 - num3);

}

}

**public** **class** Maim

{

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

SubtractionTest subtractionTest = **new** SubtractionTest();

subtractionTest.subtraction(100, 10);

subtractionTest.subtraction(100, 90, 5);

}

}

**Op-**

90

5

**46)Increment-**

**package** javavar;

**public** **class** Main {

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

**int** x = 5;

x += 3;

System.***out***.println(x);

}

}

**Op-**

**8**

**47)Main-**

**package** javavar;

**public** **class** Main1 {

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

**int** x = 5;

x &= 8;

System.***out***.println(x);

}

}

**Op-**

**0**

**48)Equalto-**

**package** javavar;

**public** **class** Main10 {

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

**int** x = 5;

**int** y = 3;

System.***out***.println(x == y); // returns false because 5 is not equal to 3

}

}

**Op-**

**False**

**49)NotEqualto-**

**package** javavar;

**public** **class** Main11 {

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

**int** x = 5;

**int** y = 3;

System.***out***.println(x != y); // returns true because 5 is not equal to 3

}

}

Op-

True

**50)Ternary-**

**package** javavar;

**public** **class** Main2 {

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

**int** x = 5;

x |= 3;

System.***out***.println(x);

}

}

**Op-**

**7**

**51)Less Than-**

**package** javavar;

**public** **class** Main3 {

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

**int** x = 5;

x <<= 3;

System.***out***.println(x);

}

}

**Op-**

**40**

**52)Greater than-**

**package** javavar;

**public** **class** Main4 {

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

**int** x = 5;

x >>= 3;

System.***out***.println(x);

}

}

Op-

0

**53)And Operator-**

**package** javavar;

**public** **class** Main5 {

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

**int** x = 5;

System.***out***.println(x > 3 && x < 10); // returns true because 5 is greater than 3 AND 5 is less than 10

}

}

**Op-**

**True**

**54)OR-**

**package** javavar;

**public** **class** Main6 {

**public** **class** Main {

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

**int** x = 5;

System.***out***.println(x > 3 || x < 4); // returns true because one of the conditions are true (5 is greater than 3, but 5 is not less than 4)

}

}

}

**Op-**

**True**

**55)Nor-**

**package** javavar;

**public** **class** Main7 {

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

**int** x = 5;

System.***out***.println(!(x > 3 && x < 10)); // returns false because ! (not) is used to reverse the result

}

}

**Op-**

**False**

**56)Less equal to-**

**package** javavar;

**public** **class** Main8 {

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

**int** x = 5;

**int** y = 3;

System.***out***.println(x <= y); // returns false because 5 is neither less than or equal to 3

}

}

**Op-**

**True**

**57)Greater Equl to-**

**package** javavar;

**public** **class** Main9 {

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

**int** x = 5;

**int** y = 3;

System.***out***.println(x >= y); // returns true because 5 is greater, or equal, to 3

}

}

**Op-**

**True**

**58)Method Overloading-**

**package** javavar;

**import** java.io.\*;

**class** fruits {

**void** fruit()

{

System.***out***.println("fruit() method of base class");

System.***out***.println("Apple is a fruit.");

}

}

**class** person **extends** fruits {

**void** fruit()

{

System.***out***.println("fruit() method of derived class");

System.***out***.println("person is eating apple.");

}

}

**public** **class** MethodOverridingEx {

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

{

person d1 = **new** person();

fruits a1 = **new** fruits();

d1.fruit();

a1.fruit();

fruits animal = **new** person();

animal.fruit();

}

}

**Op-**

fruit() method of base class

Apple is a fruit.

fruit() method of derived class

person is eating apple.

**59)Method-**

**package** javavar;

**public** **class** Methodjava {

**public** **void** easy() { // create easy() method

System.***out***.println("It is Very Easy to perfrom");

}

**public** **void** myMethod() { // create myMethod() method

System.***out***.println("This is java method programm");

}

**static** **void** sub(**int** a ,**int** b) { // create a sub() method

**int** s=a-b;

System.***out***.println("subtraction:"+s);

}

}

**60)MultiList-**

**package** javavar;

**public** **class** Multi {

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

**int**[][] myNumbers = { {1, 2, 3, 4}, {5, 6, 7} };

System.***out***.println(myNumbers[1][2]);

}

}

**Op-**

**7**

**61)MutiVaraible-**

**package** javavar;

**public** **class** Multiarray {

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

**int** [][] myNumbers = { {1, 2, 3, 4}, {5, 6, 7}};

**for** (**int** i = 0; i < myNumbers.length; i++)

{

**for**(**int** j = 0; j < myNumbers[i].length; j++)

{

System.***out***.println(myNumbers[i] [j]);

}

**for** (**int** i : myNumbers) {

System.***out***.println(i);

}

}

}

}

**Op-**

61

150

**62)MyNum-**

**package** javavar;

**public** **class** MYNUM {

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

**int** myNum;

myNum = 10;

System.***out***.println(myNum);

}

}

**Op-**

**10**

**63)Nested-**

**package** javavar;

**public** **class** Nested {

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

**int** arr[]={12,13,14,44};

**for**(**int** i:arr){

System.***out***.println(i);

}

}

}

**Op-**

12

13

14

44

**64)NestedLoop-**

**package** javavar;

**public** **class** Nestedloop {

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

// Outer loop.

**for** (**int** i = 1; i <= 2; i++) {

System.***out***.println("Outer: " + i);// Executes 2 times

System.***out***.println("rijwana");

// Inner loop

**for** (**int** j = 1; j <= 3; j++) {

System.***out***.println(" Inner: " + j); // Executes 6 times (2 \* 3)

System.***out***.println("shaikh");

}

}

}

}

**Op-**

Outer: 1

rijwana

Inner: 1

shaikh

Inner: 2

shaikh

Inner: 3

shaikh

Outer: 2

rijwana

Inner: 1

shaikh

Inner: 2

shaikh

Inner: 3

shaikh

**65)NoArgument-**

**package** javavar;

**public** **class** NOargu {

**int** i;

// constructor with no parameter

**private** NOargu () {

i = 5;

System.***out***.println("Constructor is called");

}

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

// calling the constructor without any parameter

NOargu obj = **new** NOargu();

System.***out***.println("Value of i: " + obj.i);

}

}

**Op-**

Constructor is called

Value of i: 5

**66)OperatorExample-**

**package** javavar;

**public** **class** OperatorExample{

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

**int** x=10;

System.***out***.println(x++);//10 (11)

System.***out***.println(++x);//12

System.***out***.println(x--);//12 (11)

System.***out***.println(--x);//10

}}

Op-

10

12

12

10

**67)Parameterized const-**

**package** javavar;

**public** **class** Parameter {

String girls;

// constructor accepting single value

Parameter(String name) {

girls = name;

System.***out***.println(girls + "good girl");

}

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

// call constructor by passing a single value

Parameter obj1 = **new** Parameter("usha");

Parameter obj2 = **new** Parameter("riju");

Parameter obj3 = **new** Parameter("khushi");

}

}

**Op-**

ushagood girl

rijugood girl

khushigood girl

**68)Paramter of Object-**

**package** javavar;

**public** **class** ProgramofObj {

**int** quantity =10;

**int** fruit2=2;

**final** **int** price=100;

**int** price1=200;

String color ="red";

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

ProgramofObj apple = **new** ProgramofObj();

ProgramofObj banana = **new** ProgramofObj();

ProgramofObj mango = **new** ProgramofObj();

ProgramofObj kivi = **new** ProgramofObj();

ProgramofObj rose = **new** ProgramofObj();

System.***out***.println("apple quantity:"+apple.quantity);

System.***out***.println("apple price:"+apple.price);

System.***out***.println("kivi price1:"+kivi.price1);

System.***out***.println("mango price1:"+mango.price1);

System.***out***.println("rose color:"+rose.color);

}

}

**Op-**

kivi price1:200

mango price1:200

rose color:red

**69)Quene Ex-**

**package** javavar;

**import** java.util.\*;

**public** **class** QueneEx {

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

PriorityQueue<String> queue=**new** PriorityQueue<String>();

queue.add("rijwana shaikh");

queue.add("usha bansode");

queue.add("anjlisamla");

queue.add("Rutuja");

System.***out***.println("head:"+queue.element());

System.***out***.println("head:"+queue.peek());

System.***out***.println("iterating the queue elements:");

Iterator itr=queue.iterator();

**while**(itr.hasNext()){

System.***out***.println(itr.next());

}

queue.remove();

queue.poll();

System.***out***.println("after removing two elements:");

Iterator<String> itr2=queue.iterator();

**while**(itr2.hasNext()){

System.***out***.println(itr2.next());

}

}

}

**Op-**

head:Rutuja

head:Rutuja

iterating the queue elements:

Rutuja

anjlisamla

rijwana shaikh

usha bansode

after removing two elements:

rijwana shaikh

usha bansode

**70)Reverse another Array-**

**package** javavar;

**public** **class** ReverseArrayWithoutAnotherArray {

**public** **static** **void** main(**final** String[] args) {

**final** **int**[] array = { 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 };

**final** **int** middle = array.length / 2;

**int** temp;

**int** j = array.length -1;

**for**(**final** **int** a : array){

System.***out***.println(" before reverse :: " + a);

}

**for** (**int** i = 0 ; i < middle; i++, j--) {

temp = array[i];

array[i] = array[j];

array[j] = temp;

}

**for**(**final** **int** a : array){

System.***out***.println(" after reverse :: " + a);

}

}

}

**Op-**

before reverse :: 1

before reverse :: 2

before reverse :: 3

before reverse :: 4

before reverse :: 5

before reverse :: 6

before reverse :: 7

before reverse :: 8

before reverse :: 9

before reverse :: 10

after reverse :: 10

after reverse :: 9

after reverse :: 8

after reverse :: 7

after reverse :: 6

after reverse :: 5

after reverse :: 4

after reverse :: 3

after reverse :: 2

after reverse :: 1

**71)Array to string-**

package javavar;

import java.util.Arrays;

import java.util.Scanner;

public class Sample {

public static void main(String args[]){

//Reading the array from the user

Scanner sc = new Scanner(System.in);

System.out.println("Enter the size of the array that is to be created: ");

int size = sc.nextInt();

int[] myArray = new int[size];

System.out.println("Enter the elements of the array: ");

for(int i=0; i<size; i++){

myArray[i] = sc.nextInt();

}

//Reading the number

System.out.println("Enter the number: ");

int num = sc.nextInt();

System.out.println("The array created is: "+Arrays.toString(myArray));

System.out.println("indices of the elements whose sum is: "+num);

for(int i=0; i<myArray.length; i++){

for (int j=i; j<myArray.length; j++){

if((myArray[i]+myArray[j])== num && i!=j){

System.out.println(i+", "+j);

}

}

}

}

}

Op-

Enter the size of the array that is to be created:

9

Enter the elements of the array:

9

7

4

7

8

3

65

6

7

Enter the number:

7

The array created is: [9, 7, 4, 7, 8, 3, 65, 6, 7]

indices of the elements whose sum is: 7

2, 5

**72)SETGET-**

**package** javavar;

**public** **class** SetGet {

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

En a = **new** En();

a.setDetails("rijwana", "Shaikh",05,"Comp");

System.***out***.println("Full Name: "+a.getDetails());

}

}

**Op-**

Full Name: rijwanaShaikh5Comp

**73)StackEx-**

**package** javavar;

**import** java.util.\*;

**public** **class** StackEx {

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

Stack<String> stack = **new** Stack<String>();

stack.push("rijwana");

stack.push("usha");

stack.push("Anjli");

stack.push("chatali");

stack.push("ashwini");

stack.pop();

Iterator<String> itr=stack.iterator();

**while**(itr.hasNext()){

System.***out***.println(itr.next());

}

}

}

**Op-**

usha

Anjli

chatali

**73)Sub-Array-**

**package javavar;**

**import java.util.Arrays;**

**import java.util.Scanner;**

**public class sub\_arrays {**

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

**//Reading the array from the user**

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

**System.out.println("Enter the size of the array that is to be created: ");**

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

**int[] myArray = new int[size];**

**System.out.println("Enter the elements of the array: ");**

**for(int i=0; i<size; i++){**

**myArray[i] = sc.nextInt();**

**}**

**//Reading the number**

**System.out.println("Enter the required sum: ");**

**int reqSum = sc.nextInt();**

**System.out.println("The array created is: "+Arrays.toString(myArray));**

**System.out.println("sub arrays whose sum is: "+reqSum);**

**for(int i=0; i<myArray.length; i++){**

**int sum = 0;**

**for (int j=i; j<myArray.length; j++){**

**sum = sum + myArray[j];**

**if(sum == reqSum){**

**System.out.println(Arrays.toString(Arrays.copyOfRange(myArray, i, j+1)));**

**}**

**}**

**}**

**}**

**}**

**Op-** Enter the size of the array that is to be created:

4

Enter the elements of the array:

7

7

4

6

Enter the required sum:

7

The array created is: [7, 7, 4, 6]

sub arrays whose sum is: 7

[7]

[7]

**74)Super Java-**

**package** javavar;

**class** princi{ // Superclass (parent)

**public** **void** student() {

System.***out***.println("student are good in every sub.");

}

}

**class** teacher **extends** princi { // Subclass (child)

**public** **void** student() {

**super**.student(); // Call the superclass method

System.***out***.println("teacher teach a well.");

}

}

**public** **class** Super {

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

princi mys = **new** teacher(); // Create a Dog object

mys.student(); // Call the method on the Dog object

}

}

**Op-**

student are good in every sub.

teacher teach a well.

**75)Inheritance-**

**package** javavar;

**class** Laptop{

**void** work(){System.***out***.println("working");}

}

**class** mobile **extends** Laptop{

**void** game(){System.***out***.println("gaming");}

**void** use(){System.***out***.println("useful");}

**void** work(){

**super**.work();

game();

}

}

**class** SuperEx{

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

mobile d=**new** mobile();

d.work();

}}

**Op-**

working

gaming

**76)ThirdLargestNumber In araay-**

**package** javavar;

**public** **class** ThirdLargestNumberInAnArray {

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

**int** temp, size;

**int** array[] = {10, 20, 25, 63, 96, 57};

size = array.length;

**for**(**int** i = 0; i<size; i++ ){

**for**(**int** j = i+1; j<size; j++){

**if**(array[i]>array[j]){

temp = array[i];

array[i] = array[j];

array[j] = temp;

}

}

}

System.***out***.println("second largest number is:: "+array[size-1]);

}

}

**Op-**

second largest number is:: 96

**77)Throws-**

**package** javavar;

**public** **class** ThrowsEx {

//function to check if person is eligible to vote or not

**public** **static** **void** validate(**int** age) {

**if**(age<18) {

//throw Arithmetic exception if not eligible to vote

**throw** **new** ArithmeticException("Person is not eligible to vote");

}

**else** {

System.***out***.println("Person is eligible to vote!!");

}

}

//main method

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

//calling the function

*validate*(19);

System.***out***.println("rest of the code...");

}

}

**Op-**

Person is eligible to vote!!

rest of the code...

**78)Tree set-**

**package** javavar;

**import** java.util.\*;

**public** **class** Treeset {

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

//Creating and adding elements

TreeSet<String> set=**new** TreeSet<String>();

set.add("student");

set.add("teacher");

set.add("princi");

set.add("peon");

//traversing elements

Iterator<String> itr=set.iterator();

**while**(itr.hasNext()){

System.***out***.println(itr.next());

}

}

}

**Op-**

princi

student

teacher

**79)variable-**

**package** javavar;

**public** **class** varaible {

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

{

**int** a=10;

**int** b=20;

**int** c=a+b;

System.***out***.print(c);

}

}

**Op-**

30

**80)Zero From Non Zero-**

import java.util.Arrays;

import java.util.Scanner;

public class ZerosFromNonZeros {

public static void main(String args[]){

//Reading the array from the user

Scanner sc = new Scanner(System.in);

System.out.println("Enter the size of the array that is to be created: ");

int size = sc.nextInt();

int[] myArray = new int[size];

System.out.println("Enter the elements of the array: ");

for(int i=0; i<size; i++){

myArray[i] = sc.nextInt();

}

System.out.println("The array created is: "+Arrays.toString(myArray));

System.out.println("Resultant array: ");

int pos = 0;

for(int i=0; i<myArray.length; i++){

if(myArray[i]!=0){

myArray[pos]=myArray[i];

pos++;

}

}

while(pos<myArray.length) {

myArray[pos] = 0;

pos++;

}

System.out.println("The array created is: "+Arrays.toString(myArray));

}

}

Op-

Enter the size of the array that is to be created:

8

Enter the elements of the array:

8

7

6

6

7

7

8

8

The array created is: [8, 7, 6, 6, 7, 7, 8, 8]

Resultant array:

The array created is: [8, 7, 6, 6, 7, 7, 8, 8]

**81)IFElseLader-**

**import** java.util.Scanner;

**public** **class** Ifladder

{

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

{

//Take input from the user

//Create an instance of the Scanner class

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

System.***out***.println("Enter the marks obtained: ");

**int** num=sc.nextInt();

//Determine the grades from the marks obtained

**if**(num<50)

{

System.***out***.println("fail");

}

**else** **if**(num>=50 && num<60)

{

System.***out***.println("D grade");

}

**else** **if**(num>=60 && num<70)

{

System.***out***.println("C grade");

}

**else** **if**(num>=70 && num<80)

{

System.***out***.println("B grade");

}

**else** **if**(num>=80 && num<90)

{

System.***out***.println("A grade");

}

**else** **if**(num>=90 && num<100)

{

System.***out***.println("A+ grade");

}

**else**

{

System.***out***.println("Invalid!");

}

}

}

**Op-**

Enter the marks obtained:

90

A+ grade

**82)InfoValue-**

**package** inof;

**public** **class** INSOF {

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

Object str=**new** String ("abc");

**if**(str **instanceof** String) {

System.***out***.println("String value:" +str);

}

**if**(str **instanceof** Integer){

System.***out***.println(" Integer value:" +str);

}

}

}

**Op-**

String value:abc

**83)Sample Pgm-**

**package** javapgm;

**public** **class** abc {

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

System.***out***.println("Hello java ");

}

}

**Op-**

Hello java