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JAVA Programs
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## 50++ Java Program

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#### 1. Simple Java Program

```
class HelloWorld
{
   public static void main(String args[])
   {
      System.out.println("Hello World by Technolamror");
   }
}
```

### 2. Print Integer in java

```
class Integers {
  public static void main(String[] arguments) {
    int c; //declaring a variable

  /* Using for loop to repeat instruction execution */

  for (c = 1; c <= 10; c++) {
    System.out.println(c);
  }
}</pre>
```

### 3. Command Line Argument in java

```
class Arguments {
  public static void main(String[] args) {
    for (String t: args) {
        System.out.println(t);
    }
  }
}
```





# 4. How to get Using input using Scanner Program in <u>java</u>

```
import java.util.Scanner;
class GetInputFromUser
  public static void main(String args[])
      int a;
      float b;
      String s;
      Scanner in = new Scanner(System.in);
     System.out.println("Enter a string");
      s = in.nextLine();
      System.out.println("You entered string "+s);
     System.out.println("Enter an integer");
      a = in.nextInt();
      System.out.println("You entered integer "+a);
     System.out.println("Enter a float");
     b = in.nextFloat();
      System.out.println("You entered float "+b);
```

# 5. How to convert Fahrenheit to Celsius Program in java

```
import java.util.*;

class FahrenheitToCelsius {
   public static void main(String[] args) {
      float temperatue;
      Scanner in = new Scanner(System.in);

      System.out.println("Enter temperatue in Fahrenheit");
      temperatue = in.nextInt();

      temperatue = ((temperatue - 32)*5)/9;

      System.out.println("Temperatue in Celsius = " + temperatue);
    }
}
```







# 6. How to swap 2 no using 3<sup>rd</sup> variable Program in java

```
import java.util.Scanner;

class SwapNumbers
{
    public static void main(String args[])
    {
        int x, y, temp;
        System.out.println("Enter x and y");
        Scanner in = new Scanner(System.in);

        x = in.nextInt();
        y = in.nextInt();

        System.out.println("Before Swapping\nx = "+x+"\ny = "+y);

        temp = x;
        x = y;
        y = temp;

        System.out.println("After Swapping\nx = "+x+"\ny = "+y);
    }
}
```

# 7. How to swap 2 no without using 3<sup>rd</sup> variable Program in java

```
import java.util.Scanner;

class SwapNumbers
{
   public static void main(String args[])
   {
      int x, y;
      System.out.println("Enter x and y");
      Scanner in = new Scanner(System.in);

      x = in.nextInt();
      y = in.nextInt();
      System.out.println("Before Swapping\nx = "+x+"\ny = "+y);
```







```
x = x + y;
y = x - y;
x = x - y;

System.out.println("After Swapping\nx = "+x+"\ny = "+y);
}
```

#### 8. How to add two number Program in java

```
import java.util.Scanner;
class AddNumbers
  public static void main(String args[])
      int x, y, z;
      System.out.println("Enter two integers to calculate their sum ");
      Scanner in = new Scanner(System.in);
      x = in.nextInt();
     y = in.nextInt();
     z = x + y;
      System.out.println("Sum of entered integers = "+z);
//For Large Number
import java.util.Scanner;
import java.math.BigInteger;
class AddingLargeNumbers {
 public static void main(String[] args) {
    String number1, number2;
    Scanner in = new Scanner(System.in);
    System.out.println("Enter first large number");
    number1 = in.nextLine();
    System.out.println("Enter second large number");
    number2 = in.nextLine();
   BigInteger first = new BigInteger(number1);
    BigInteger second = new BigInteger(number2);
   BigInteger sum;
    sum = first.add(second);
    System.out.println("Result of addition = " + sum);
```





}

#### 9. Find Largest no in java Program

```
import java.util.Scanner;
class LargestOfThreeNumbers
  public static void main(String args[])
     int x, y, z;
     System.out.println("Enter three integers ");
      Scanner in = new Scanner(System.in);
     x = in.nextInt();
      y = in.nextInt();
      z = in.nextInt();
      if (x > y && x > z )
         System.out.println("First number is largest.");
      else if ( y > x && y > z )
         System.out.println("Second number is largest.");
      else if (z > x \&\& z > y)
         System.out.println("Third number is largest.");
      else
         System.out.println("Entered numbers are not distinct.");
```

### 10. If Else clause in java

```
class Condition {
  public static void main(String[] args) {
    boolean learning = true;

  if (learning) {
      System.out.println("Java programmer");
    }
  else {
      System.out.println("What are you doing here?");
    }
  }
}
```





### 11. If Else clause in java- Program 2

```
// If else in Java code
import java.util.Scanner;

class IfElse {
   public static void main(String[] args) {
      int marksObtained, passingMarks;

      passingMarks = 40;

      Scanner input = new Scanner(System.in);

      System.out.println("Input marks scored by you");

      marksObtained = input.nextInt();

   if (marksObtained >= passingMarks) {
        System.out.println("You passed the exam.");
    }

   else {
      System.out.println("Unfortunately you failed to pass the exam.");
   }
}
```

## 12. Nested If Else clause in java import java.util.Scanner;







```
else if (marksObtained > 75)
    grade = 'B';
else if (marksObtained > 60)
    grade = 'C';
else
    grade = 'D';

System.out.println("You passed the exam and your grade is " + grade);
}
else {
    grade = 'F';
    System.out.println("You failed and your grade is " + grade);
}
}
```

#### 13. How to check Odd and Even Number in java.

```
class OddOrEven
{
   public static void main(String args[])
   {
      int x;
      System.out.println("Enter an integer to check if it is odd or even ");
      Scanner in = new Scanner(System.in);
      x = in.nextInt();

   if ( x % 2 == 0 )
      System.out.println("You entered an even number.");
   else
      System.out.println("You entered an odd number.");
   }
}
```

#### 14. Find factorial for given no Program in Java

```
import java.util.Scanner;

class Factorial
{
   public static void main(String args[])
   {
      int n, c, fact = 1;
      System.out.println("Enter an integer to calculate it's factorial");
      Scanner in = new Scanner(System.in);
      n = in.nextInt();
```







```
if ( n < 0 )
         System.out.println("Number should be non-negative.");
      else
         for ( c = 1 ; c \le n ; c++ )
           fact = fact*c;
        System.out.println("Factorial of "+n+" is = "+fact);
   }
}
//Calculate factorial for large No
import java.util.Scanner;
import java.math.BigInteger;
class BigFactorial
 public static void main(String args[])
   int n, c;
   BigInteger inc = new BigInteger("1");
    BigInteger fact = new BigInteger("1");
    Scanner input = new Scanner(System.in);
    System.out.println("Input an integer");
   n = input.nextInt();
    for (c = 1; c <= n; c++) {
     fact = fact.multiply(inc);
      inc = inc.add(BigInteger.ONE);
    System.out.println(n + "! = " + fact);
```

### 15. How to complete 2 string in Java program

```
import java.util.Scanner;

class CompareStrings
{
   public static void main(String args[])
   {
      String s1, s2;
      Scanner in = new Scanner(System.in);

      System.out.println("Enter the first string");
      s1 = in.nextLine();
```







```
System.out.println("Enter the second string");
s2 = in.nextLine();

if ( s1.compareTo(s2) > 0 )
        System.out.println("First string is greater than second.");
else if ( s1.compareTo(s2) < 0 )
        System.out.println("First string is smaller than second.");
else
        System.out.println("Both strings are equal.");
}</pre>
```

#### 16. Simple For **Loop** Program in Java

```
//Java for loop program
class ForLoop {
  public static void main(String[] args) {
    int c;

    for (c = 1; c <= 10; c++) {
        System.out.println(c);
    }
  }
}</pre>
```

#### 17. Print Star console using Loop

```
class Stars {
  public static void main(String[] args) {
    int row, numberOfStars;

  for (row = 1; row <= 10; row++) {
     for(numberOfStars = 1; numberOfStars <= row; numberOfStars++) {
        System.out.print("*");
     }
     System.out.println(); // Go to next line
     }
}</pre>
```

Out of loop





```
<terminated> scan [Java Application] C:\Program Files\Java\jre1.8.0_91\bin\javaw.exe (Jan 8, 2017, 2:35:46 PM)
Input an integer
2
You entered 2
Input an integer
1
You entered 1
Input an integer
6
You entered 6
Input an integer
1
You entered 1
Input an integer
1
You entered 1
Input an integer
```

### 18. Print Star console using Loop

```
class Stars {
  public static void main(String[] args) {
    int row, numberOfStars;

  for (row = 1; row <= 10; row++) {
     for(numberOfStars = 1; numberOfStars <= row; numberOfStars++) {
        System.out.print("*");
     }
     System.out.println(); // Go to next line
     }
}</pre>
```

#### 19. While loop Program in java

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

    Scanner input = new Scanner(System.in);
    System.out.println("Input an integer");

  while ((n = input.nextInt()) != 0) {
      System.out.println("You entered " + n);
      System.out.println("Input an integer");
    }

    System.out.println("Out of loop");
}
```

import java.util.Scanner;







}

#### 20. Print Reverse number in java program

```
class ReverseNumber
{
   public static void main(String args[])
   {
      int n, reverse = 0;
        System.out.println("Enter the number to reverse");
        Scanner in = new Scanner(System.in);
      n = in.nextInt();

      while( n != 0 )
      {
            reverse = reverse * 10;
            reverse = reverse + n%10;
            n = n/10;
        }

        System.out.println("Reverse of entered number is "+reverse);
    }
}
```

## 21. While loop using break Program in java import java.util.Scanner;

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

    Scanner input = new Scanner(System.in);

  while (true) {
      System.out.println("Input an integer");
      n = input.nextInt();

    if (n == 0) {
      break;
    }
      System.out.println("You entered " + n);
    }
}
```





# 22. While loop using break and continue Program in java

```
import java.util.Scanner;

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

      Scanner input = new Scanner(System.in);

      while (true) {
            System.out.println("Input an integer");
            n = input.nextInt();

      if (n != 0) {
            System.out.println("You entered " + n);
            continue;
        }
      else {
            break;
        }
    }
    }
}
```

# 23. Print all alphabet using for <a href="loop">loop</a> Program in java

```
class Alphabets
{
   public static void main(String args[])
   {
      char ch;

      for( ch = 'a' ; ch <= 'z' ; ch++ )
            System.out.println(ch);
    }
}</pre>
```





#### 24. Enhance loop in java Program

```
class EnhancedForLoop {
  public static void main(String[] args) {
    int primes[] = { 2, 3, 5, 7, 11, 13, 17, 19, 23, 29};

  for (int t: primes) {
      System.out.println(t);
    }
  }
}

//For String
class EnhancedForLoop {
  public static void main(String[] args) {
      String languages[] = { "C", "C++", "Java", "Python", "Ruby"};
    for (String sample: languages) {
      System.out.println(sample);
    }
  }
}
```

### 25. Print Multiplication table Program in java







```
System.out.println("Enter range of numbers to print their multiplication
table");
    Scanner in = new Scanner(System.in);

a = in.nextInt();
b = in.nextInt();

for (c = a; c <= b; c++) {
    System.out.println("Multiplication table of "+c);

    for (d = 1; d <= 10; d++) {
        System.out.println(c+"*"+d+" = "+(c*d));
    }
}</pre>
```

### 26. Print prime no Program in java

```
import java.util.*;
class PrimeNumbers
   public static void main(String args[])
      int n, status = 1, num = 3;
      Scanner in = new Scanner(System.in);
      System.out.println("Enter the number of prime numbers you want");
      n = in.nextInt();
      if (n >= 1)
         System.out.println("First "+n+" prime numbers are :-");
         System.out.println(2);
      for ( int count = 2 ; count <=n ; )</pre>
         for ( int j = 2 ; j <= Math.sqrt(num) ; j++ )</pre>
            if ( num%j == 0 )
               status = 0;
               break;
         if ( status != 0 )
            System.out.println(num);
            count++;
```





```
status = 1;
num++;
}
}
```

# 27. Check no is Armstrong or not in java Program

```
import java.util.Scanner;
class ArmstrongNumber
  public static void main(String args[])
      int n, sum = 0, temp, remainder, digits = 0;
      Scanner in = new Scanner(System.in);
      System.out.println("Input a number to check if it is an Armstrong
number");
     n = in.nextInt();
      temp = n;
      // Count number of digits
      while (temp != 0) {
        digits++;
        temp = temp/10;
      temp = n;
      while (temp != 0) {
        remainder = temp%10;
        sum = sum + power(remainder, digits);
        temp = temp/10;
      }
      if (n == sum)
        System.out.println(n + " is an Armstrong number.");
      else
        System.out.println(n + " is not an Armstrong number.");
   static int power(int n, int r) {
      int c, p = 1;
      for (c = 1; c <= r; c++)
        p = p*n;
      return p;
```





}

## 28. Print Floyd's Triangle in java Program import java.util.Scanner;

## 29. Find All substring of string in java Program import java.util.Scanner;

```
class SubstringsOfAString
{
   public static void main(String args[])
   {
      String string, sub;
      int i, c, length;

      Scanner in = new Scanner(System.in);
      System.out.println("Enter a string to print it's all substrings");
      string = in.nextLine();

   length = string.length();
```







### 30. Print reverse string in java Program

```
import java.util.*;
class ReverseString
  public static void main(String args[])
      String original, reverse = "";
      Scanner in = new Scanner(System.in);
      System.out.println("Enter a string to reverse");
      original = in.nextLine();
      int length = original.length();
      for ( int i = length - 1 ; i >= 0 ; i-- )
        reverse = reverse + original.charAt(i);
      System.out.println("Reverse of entered string is: "+reverse);
   }
//Using Internal java Methog
class InvertString
  public static void main(String args[])
      StringBuffer a = new StringBuffer("Java programming is fun");
      System.out.println(a.reverse());
```





# 31. Check Given No is palindrome or Not in java Program

```
import java.util.*;
class Palindrome
  public static void main(String args[])
      String original, reverse = "";
      Scanner in = new Scanner(System.in);
      System.out.println("Enter a string to check if it is a palindrome");
      original = in.nextLine();
      int length = original.length();
      for ( int i = length - 1; i >= 0; i-- )
        reverse = reverse + original.charAt(i);
      if (original.equals(reverse))
         System.out.println("Entered string is a palindrome.");
      else
         System.out.println("Entered string is not a palindrome.");
//Another Method
import java.util.*;
class Palindrome
 public static void main(String args[])
    String inputString;
    Scanner in = new Scanner(System.in);
    System.out.println("Input a string");
    inputString = in.nextLine();
    int length = inputString.length();
    int i, begin, end, middle;
   begin = 0;
    end = length -1;
   middle = (begin + end)/2;
    for (i = begin; i <= middle; i++) {</pre>
      if (inputString.charAt(begin) == inputString.charAt(end)) {
       begin++;
       end--;
      else {
       break;
```





```
if (i == middle + 1) {
    System.out.println("Palindrome");
}
else {
    System.out.println("Not a palindrome");
}
}
```

#### 32. How to add two matrix in java Program

```
import java.util.Scanner;
class AddTwoMatrix
  public static void main(String args[])
      int m, n, c, d;
      Scanner in = new Scanner(System.in);
      System.out.println("Enter the number of rows and columns of matrix");
     m = in.nextInt();
      n = in.nextInt();
      int first[][] = new int[m][n];
      int second[][] = new int[m][n];
      int sum[][] = new int[m][n];
      System.out.println("Enter the elements of first matrix");
      for ( c = 0 ; c < m ; c++ )
         for ( d = 0 ; d < n ; d++ )
            first[c][d] = in.nextInt();
      System.out.println("Enter the elements of second matrix");
      for ( c = 0 ; c < m ; c++ )
         for ( d = 0 ; d < n ; d++ )
            second[c][d] = in.nextInt();
      for ( c = 0 ; c < m ; c++ )
         for ( d = 0 ; d < n ; d++ )
             sum[c][d] = first[c][d] + second[c][d]; //replace '+' with '-'
to subtract matrices
      System.out.println("Sum of entered matrices:-");
      for (c = 0; c < m; c++)
         for ( d = 0 ; d < n ; d++ )
            System.out.print(sum[c][d]+"\t");
         System.out.println();
```

import java.util.Scanner;





```
} }
```

#### 33. How to multiply two matrix in java Program

```
class MatrixMultiplication
  public static void main(String args[])
      int m, n, p, q, sum = 0, c, d, k;
      Scanner in = new Scanner(System.in);
      System.out.println("Enter the number of rows and columns of first
matrix");
     m = in.nextInt();
      n = in.nextInt();
      int first[][] = new int[m][n];
      System.out.println("Enter the elements of first matrix");
      for ( c = 0 ; c < m ; c++ )
         for (d = 0 ; d < n ; d++)
            first[c][d] = in.nextInt();
      System.out.println("Enter the number of rows and columns of second
matrix");
     p = in.nextInt();
      q = in.nextInt();
      if ( n != p )
         System.out.println("Matrices with entered orders can't be multiplied
with each other.");
      else
         int second[][] = new int[p][q];
         int multiply[][] = new int[m][q];
         System.out.println("Enter the elements of second matrix");
         for (c = 0 ; c 
            for ( d = 0 ; d < q ; d++ )
              second[c][d] = in.nextInt();
         for (c = 0 ; c < m ; c++)
            for (d = 0 ; d < q ; d++)
               for ( k = 0 ; k < p ; k++ )
```





```
sum = sum + first[c][k]*second[k][d];

multiply[c][d] = sum;
sum = 0;
}

System.out.println("Product of entered matrices:-");

for ( c = 0 ; c < m ; c++ )

{
    for ( d = 0 ; d < q ; d++ )
        System.out.print(multiply[c][d]+"\t");

    System.out.print("\n");
}
</pre>
```

### 34. How to get transpose of matrix in java Program

```
import java.util.Scanner;
class TransposeAMatrix
  public static void main(String args[])
      int m, n, c, d;
      Scanner in = new Scanner(System.in);
      System.out.println("Enter the number of rows and columns of matrix");
     m = in.nextInt();
      n = in.nextInt();
      int matrix[][] = new int[m][n];
      System.out.println("Enter the elements of matrix");
      for ( c = 0 ; c < m ; c++ )
         for ( d = 0 ; d < n ; d++ )
            matrix[c][d] = in.nextInt();
      int transpose[][] = new int[n][m];
      for (c = 0; c < m; c++)
         for (d = 0 ; d < n ; d++)
            transpose[d][c] = matrix[c][d];
```





### 35. How to compare 2 string in java Program

```
public class LastIndexOfExample{
public static void main(String args[]){
String s1="hello";
String s2="hello";
String s3="meklo";
String s4="hemlo";
System.out.println(s1.compareTo(s2));
System.out.println(s1.compareTo(s3));
System.out.println(s1.compareTo(s4));
}}
```

# 36. How to string width with specific char in java Program

```
class StringEndwith{
public static void main(String args[]){
String s1="java by TechnoLamror";
System.out.println(s1.endsWith("r")); //true
System.out.println(s1.endsWith("Lamror")); //true
System.out.println(s1.endsWith("lamror"));//false
}
}
```

### 37. How to use indesOf() in java Program

```
public class IndexOfExample{
public static void main(String args[]){
String s1="this is index of example";
//passing substring
int index1=s1.indexOf("is");//returns the index of is substring
int index2=s1.indexOf("index");//returns the index of index substring
System.out.println(index1+" "+index2);//2 8
```







```
//passing substring with from index
int index3=s1.indexOf("is",4);//returns the index of is substring after 4th index
System.out.println(index3);//5 i.e. the index of another is

//passing char value
int index4=s1.indexOf('s');//returns the index of s char value
System.out.println(index4);//3
}}
```

# 38. How to replace string with another string in java Program

```
public class ReplaceAllExample2{
public static void main(String args[]){
String s1="My name is Rajendra. My name is lamror. My name is Technolamror.";
String replaceString=s1.replaceAll("is","was");//replaces all occurrences of "is" to "was"
System.out.println(replaceString);
}}
```

#### 39. How to split string in java Program

```
public class SplitExample{
public static void main(String args[]){
String s1="java string split method by Technolamror";
String[] words=s1.split("\\s");//splits the string based on whitespace
//using java foreach loop to print elements of string array
for(String w:words){
System.out.println(w);
}
}}
```

# 40. How to remove space in string both end in <a href="mailto:iava">iava</a> Program

```
public class StringTrimExample{
public static void main(String args[]){
String s1=" hello string ";
System.out.println(s1+"Technolamror");//without trim()
System.out.println(s1.trim()+"Technolamror");//with trim()
}}
```

# 41. How to convert all char in string lower case in java Program

```
public class StringLowerExample{
public static void main(String args[]){
String s1="TECHNOLAMROR by Rajendralamror HELLO stRIng";
String s1lower=s1.toLowerCase();
```







```
System.out.println(s1lower);
}}
```

#### 42. How to create method in java Program

```
class Methods {
  // Constructor method
 Methods() {
   System.out.println("Constructor method is called when an object of it's
class is created");
  // Main method where program execution begins
 public static void main(String[] args) {
   staticMethod();
   Methods object = new Methods();
   object.nonStaticMethod();
 // Static method
  static void staticMethod() {
   System.out.println("Static method can be called without creating
object");
 // Non static method
 void nonStaticMethod() {
    System.out.println("Non static method must be called by creating an
object");
  }
```

# 43. Find Length, Concatenate and Replace String in <u>Java</u> Program

```
class StringMethods
{
   public static void main(String args[])
   {
     int n;
     String s = "Java programming", t = "", u = "";
     System.out.println(s);
     // Find length of string
```







```
n = s.length();
System.out.println("Number of characters = " + n);

// Replace characters in string

t = s.replace("Java", "C++");
System.out.println(s);
System.out.println(t);

// Concatenating string with another string

u = s.concat(" is fun");
System.out.println(s);
System.out.println(u);
}
```

### 44. How Static block working in java Program

```
class StaticBlock {
  public static void main(String[] args) {
    System.out.println("Main method is executed.");
}

static {
    System.out.println("Static block is executed before main method.");
}

//Static Block Application .... We need to open Program in speciff window class StaticBlock {
    public static void main(String[] args) {
        System.out.println("You are using Windows_NT operating system.");
}

static {
    String os = System.getenv("OS");
    if (os.equals("Windows_NT") != true) {
        System.exit(1);
    }
}
```

# 45. Difference between Static and Instance method working in java Program

```
class Difference {
  public static void main(String[] args) {
    display(); //calling without object
```







```
Difference t = new Difference();
    t.show(); //calling using object
}

static void display() {
    System.out.println("Programming is amazing.");
}

void show() {
    System.out.println("Java is awesome.");
}
```

### 46. How to create Multiple class in java Program

```
class Computer {
  Computer() {
    System.out.println("Constructor of Computer class.");
  void computer method() {
    System.out.println("Power gone! Shut down your PC soon...");
  public static void main(String[] args) {
    Computer my = new Computer();
    Laptop your = new Laptop();
    my.computer method();
    your.laptop method();
}
class Laptop {
  Laptop() {
    System.out.println("Constructor of Laptop class.");
  void laptop method() {
    System.out.println("99% Battery available.");
```

#### 47. How to create constructor in java Program

```
class Programming {
  //constructor method
  Programming() {
    System.out.println("Constructor method called.");
  }
```







```
public static void main(String[] args) {
    Programming object = new Programming(); //creating object
}
```

# 48. How to create constructor overloading in java Program

```
class Language {
  String name;
  Language() {
    System.out.println("Constructor method called.");
  Language(String t) {
   name = t;
  public static void main(String[] args) {
   Language cpp = new Language();
    Language java = new Language("Java");
    cpp.setName("C++");
    java.getName();
    cpp.getName();
  void setName(String t) {
    name = t;
  void getName() {
    System.out.println("Language name: " + name);
```

### 49. Exception Handling java Program

```
class Division {
  public static void main(String[] args) {
  int a, b, result;

  Scanner input = new Scanner(System.in);
  System.out.println("Input two integers");
```







```
a = input.nextInt();
b = input.nextInt();

// try block

try {
    result = a / b;
    System.out.println("Result = " + result);
}

// catch block

catch (ArithmeticException e) {
    System.out.println("Exception caught: Division by zero.");
}
}
}
```

#### 50. How to throw exception in java Program

```
public class TestThrow1{
    static void validate(int age){
        if(age<18)
            throw new ArithmeticException("not valid");
        else
            System.out.println("welcome to vote on Technolamror");
    }
    public static void main(String args[]){
        validate(13);
        System.out.println("rest of the code...");
    }
}</pre>
```

# 51. Advantage of Finally in Exception Handling java Program

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

    try {
      long data[] = new long[1000000000];
    }
    catch (Exception e) {
      System.out.println(e);
    }

  finally {
      System.out.println("finally block will execute always.");
    }
  }
}
```







#### 52. How to create Interface in java Program

```
interface Info {
   static final String language = "Java";
   public void display();
}

class Simple implements Info {
   public static void main(String []args) {
      Simple obj = new Simple();
      obj.display();
   }

   // Defining method declared in interface

   public void display() {
      System.out.println(language + " is awesome");
   }
}
```

### 53. How to print date and time in java Program

```
public class SQLDateExample {
   public static void main(String[] args) {
       long millis=System.currentTimeMillis();
       java.sql.Date date=new java.sql.Date(millis);
       System.out.println(date);
   }
}
/// Another Way
import java.util.*;
class GetCurrentDateAndTime
   public static void main(String args[])
      int day, month, year;
      int second, minute, hour;
      GregorianCalendar date = new GregorianCalendar();
      day = date.get(Calendar.DAY OF MONTH);
      month = date.get(Calendar.MONTH);
      year = date.get(Calendar.YEAR);
      second = date.get(Calendar.SECOND);
      minute = date.get(Calendar.MINUTE);
      hour = date.get(Calendar.HOUR);
```







```
System.out.println("Current date is "+day+"/"+(month+1)+"/"+year);
System.out.println("Current time is "+hour+" : "+minute+" : "+second);
}
}
```

#### 54. How to SQL Date in java Program

```
import java.sql.Date;
public class StringToSQLDateExample {
  public static void main(String[] args) {
    String str="2015-03-31";
    Date date=Date.valueOf(str);//converting string into sql date
    System.out.println(date);
}
```

### 55. How to Date format in java Program

```
import java.text.ParseException;
import java.text.SimpleDateFormat;
import java.util.Date;
import java.util.Locale;
public class SimpleDateFormatExample2 {
public static void main(String[] args) {
    Date date = new Date();
    System.out.println("Date formate chnage by Technolamror ");
    SimpleDateFormat formatter = new SimpleDateFormat("MM/dd/yyyy");
    String strDate = formatter.format(date);
    System.out.println("Date Format with MM/dd/yyyy : "+strDate);
    formatter = new SimpleDateFormat("dd-M-yyyy hh:mm:ss");
    strDate = formatter.format(date);
    System.out.println("Date Format with dd-M-yyyy hh:mm:ss : "+strDate);
    formatter = new SimpleDateFormat("dd MMMM yyyy");
    strDate = formatter.format(date);
    System.out.println("Date Format with dd MMMM yyyy : "+strDate);
    formatter = new SimpleDateFormat("dd MMMM yyyy zzzz");
    strDate = formatter.format(date);
    System.out.println("Date Format with dd MMMM yyyy zzzz : "+strDate);
    formatter = new SimpleDateFormat("E, dd MMM yyyy HH:mm:ss z");
    strDate = formatter.format(date);
    System.out.println("Date Format with E, dd MMM yyyy HH:mm:ss z : "+strDate);
}
}
```





# 56. How to Generate random number in java Program

```
import java.util.*;

class RandomNumbers {
   public static void main(String[] args) {
     int c;
     Random t = new Random();

     // random integers in [0, 100]

   for (c = 1; c <= 10; c++) {
        System.out.println(t.nextInt(100));
     }
   }
}</pre>
```

### 57. How perform garbage collection in java Program

```
import java.util.*;

class GarbageCollection
{
    public static void main(String s[]) throws Exception
    {
        Runtime rs = Runtime.getRuntime();
        System.out.println("Free memory in JVM before Garbage Collection =
"+rs.freeMemory());
        rs.gc();
        System.out.println("Free memory in JVM after Garbage Collection =
"+rs.freeMemory());
    }
}
```

## 58. How to get own IP Address in java Program import java.net.InetAddress;

```
class IPAddress
{
   public static void main(String args[]) throws Exception
   {
      System.out.println(InetAddress.getLocalHost());
   }
}
```







#### 59. How to open notepad in java Program

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

class Notepad {
   public static void main(String[] args) {
      Runtime rs = Runtime.getRuntime();

      try {
       rs.exec("notepad");
    }
    catch (IOException e) {
       System.out.println(e);
    }
}
```

### 60. Leaner search Program in java

```
import java.util.Scanner;
class LinearSearch
  public static void main(String args[])
    int c, n, search, array[];
   Scanner in = new Scanner(System.in);
    System.out.println("Enter number of elements");
    n = in.nextInt();
    array = new int[n];
    System.out.println("Enter " + n + " integers");
    for (c = 0; c < n; c++)</pre>
     array[c] = in.nextInt();
    System.out.println("Enter value to find");
    search = in.nextInt();
    for (c = 0; c < n; c++)
      if (array[c] == search) /* Searching element is present */
         System.out.println(search + " is present at location " + (c + 1) +
".");
          break;
```

```
if (c == n) /* Searching element is absent */
   System.out.println(search + " is not present in array.");
}
```