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50+
JAVA Programs
For Interview

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50++ Java Program

Contents

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);
    }
  }
}
```

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 java

```
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 3rd 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 3rd 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;

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

    passingMarks = 40;

    Scanner input = new Scanner(System.in);

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

    marksObtained = input.nextInt();

    if (marksObtained >= passingMarks) {

      if (marksObtained > 90)
        grade = 'A';
```

```
      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.

```
import java.util.Scanner;

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 <= 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.");
    }
}
```

---

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);
    }
  }
}
```

---

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
    }
  }
}
```

```
<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
0
Out of loop
```

---

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
    }
  }
}
```

19. While loop Program in java

```
import java.util.Scanner;

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");
  }
```

```
}
```

---

20. Print Reverse number in java program

```
import java.util.Scanner;

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 loop Program in java

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

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

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

```
import java.util.Scanner;

class MultiplicationTable
{
   public static void main(String args[])
   {
      int n, c;
      System.out.println("Enter an integer to print it's multiplication
table");
      Scanner in = new Scanner(System.in);
      n = in.nextInt();
      System.out.println("Multiplication table of "+n+" is :-");

      for ( c = 1 ; c <= 10 ; c++ )
         System.out.println(n+"*"+c+" = "+(n*c));
   }
}


//For Any Number
import java.util.Scanner;

class Tables
{
  public static void main(String args[])
  {
    int a, b, c, d;
```

```
    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));
      }
    }
  }
}
```

---

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 ;  )
      {
         for ( int j = 2 ; j <= Math.sqrt(num) ; j++ )
         {
            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;

class FloydTriangle
{
   public static void main(String args[])
   {
      int n, num = 1, c, d;
      Scanner in = new Scanner(System.in);

      System.out.println("Enter the number of rows of floyd's triangle you
want");
      n = in.nextInt();

      System.out.println("Floyd's triangle :-");

      for ( c = 1 ; c <= n ; c++ )
      {
         for ( d = 1 ; d <= c ; d++ )
         {
            System.out.print(num+" ");
            num++;
         }

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

---

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();
```

```
        System.out.println("Substrings of \""+string+"\" are :-");

        for( c = 0 ; c < length ; c++ )
        {
           for( i = 1 ; i <= length - c ; i++ )
           {
              sub = string.substring(c, c+i);
              System.out.println(sub);
           }
        }
    }
}
```

---

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++) {
      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();
```

```
        }
    }
}
```

33. How to multiply two matrix in java Program

```
import java.util.Scanner;

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 < p ; 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");
        }
    }
}
```

---

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];
      }
```

```
        System.out.println("Transpose of entered matrix:-");

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

           System.out.print("\n");
        }
     }
}
```

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 java 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 Java 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 speciif 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...");
  }
}
```

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));
    }
  }
}
```

---

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++)
      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.");
  }
}
```
