INTERVIEW LOGICAL PROGRAM QUESTIONS

1.Write a Java Program to Print given Pattern 1*2*3

```java
public class Program1 {

    public static void main(String[] args){

        int n=5;

        int a=1;

        for(int i=1; i<=5; i++){

            if(i%2==0){

                System.out.print("*"+" ");

            }

            else{

                System.out.print(a+" ");

                a++;

            }

        }

    }
}
```

2.Write a Java Program to Print given Pattern 12321

```java
public class Program2 {

    public static void main(String[] args){

        int n=5;

        int a=1;

        for(int i=1; i<=5; i++){

            System.out.print(a+" ");

            if(i<n/2){
```

```java
                    a++;

                }
            else{

                    a--;

                }

        }

    }
}
```

3.Write a Java Program to Print Given Pattern

```
        * * * * *

        * * * * *

        * * * * *

        * * * * *

        * * * * *
```

```java
public class Program3 {

    public static void main(String[] args){

        int n=5;

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

            for(int j=0; j<n; j++){

                System.out.print("*"+" ");

            }

            System.out.println();

        }

    }
}
```

4. Write a Java Program to Print Given Pattern

```
1 1 1 1 1
2 2 2 2 2
3 3 3 3 3
4 4 4 4 4
5 5 5 5 5
```

```java
public class Program4 {

    public static void main(String[] args) {

        int n=5;

        int a=1;

        for(int i=1; i<=n; i++) {

            for(int j=1; j<=n; j++) {

                System.out.print(a+" ");

            }

            System.out.println();

            a++;

        }

    }

}
```

5. write a Java Program to Print Given Pattern

```
5 5 5 5 5
4 4 4 4 4
3 3 3 3 3
2 2 2 2 2
1 1 1 1 1
```

```java
public class Program5 {

    public static void main(String[] args) {

        int n=5;

        int a=5;

        for(int i=1; i<=n; i++) {

            for(int j=1; j<=n; j++) {

                System.out.print(a+" ");

            }

            System.out.println();

            a--;

        }

    }
}
```

6. write a Java Program to Print Given Pattern

```
a a a a a
b b b b b
c c c c c
d d d d d
e e e e e
```

```java
public class Program6 {

    public static void main(String[] args) {

        int n=5;

        char c='a';

        for(int i=1; i<=n; i++) {

            for(int j=1; j<=n; j++) {

                System.out.print(c+" ");

            }

            System.out.println();

            c++;

        }

    }
}
```

7. write a Java Program to Print Given Pattern

```
5 4 3 2 1
5 4 3 2 1
5 4 3 2 1
5 4 3 2 1
5 4 3 2 1
```

```java
public class Program7 {

    public static void main(String[] args) {

        int n=5;

        int a=5;

        for(int i=1; i<=n; i++) {

            for(int j=1; j<=n; j++) {

                System.out.print(a+" ");
```

```
                a--;
            }
            System.out.println();
            a=5;
        }
    }
}
```

8. write a Java Program to Print Given Pattern

```
        a b c d e
        a b c d e
        a b c d e
        a b c d e
        a b c d e
```

```java
public class Program8 {
    public static void main(String[] args) {
        int n=5;
        char c='a';
        for(int i=1; i<=n; i++) {
            for(int j=1; j<=n; j++) {
                System.out.print(c+" ");
                c++;
            }
            System.out.println();
            c='a'
        }
    }
}
```

}

9. write a Java Program to Print Given Pattern

```
1
2 2
3 3 3
4 4 4 4
5 5 5 5 5
```

```java
public class Program9 {

    public static void main(String[] args) {

        int n=5;

        int a=1;

        for(int i=1; i<=n; i++) {

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

                System.out.print(a+" ");

            }

            System.out.println();

            a++;

        }

    }

}
```

10. write a Java Program to Print Given Pattern

```
1
1 2
1 2 3
1 2 3 4
1 2 3 4 5
```

```java
public class Program5 {

    public static void main(String[] args) {

        int n=5;

        int a=1;

        for(int i=1; i<=n; i++) {

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

                System.out.print(a+" ");

                a++;

            }

            System.out.println();

            a=1;

        }

    }
}
```

11. write a Java Program to Print Given Pattern

```
        5
        4 4
        3 3 3
        2 2 2 2
        1 1 1 1 1
```

```java
public class Program11 {

    public static void main(String[] args) {

        int n=5;

        int a=5;

        for(int i=1; i<=n; i++) {

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

                System.out.print(a+" ");

            }

            System.out.println();

            a--;

        }

    }
}
```

12. write a Java Program to Print Given Pattern

```
        5
        5 4
        5 4 3
        5 4 3 2
        5 4 3 2 1
```

```java
public class Program12 {

    public static void main(String[] args) {

        int n=5;

        int a=5;

        for(int i=1; i<=n; i++) {

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

                System.out.print(a+" ");

                a--;

            }

            System.out.println();

            a=5;

        }

    }
}
```

13. write a Java Program to Print Given Pattern

```
*

* *

* * *

* * * *

* * * * *
```

```java
public class Program13{

    public static void main(String[] args) {

        int n=5;

        for(int i=1; i<=n; i++) {

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

```java
                System.out.print("*"+" ");

            }

        System.out.println();

    }

}
```

}

14. write a Java Program to Print Given Pattern

```
* * * * *

*

* * * * *

          *

* * * * *
```

```java
public class Program15 {

    public static void main(String[] args) {

        int n=5;

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

            for(int j=0; j<n; j++) {

                if(i==0 || i==n/2 || i==n-1 || j==0 && i<=n/2 ||
                j==n-1 && i>=n/2) {

                    System.out.print("*"+" ");

                }else {

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

                }

            }

            System.out.println();

        }
```

```
        }

}
```

15. write a Java Program to find Square Root of 1 to 5

```java
public class Program15 {

    public static void main(String[] args) {

        int start=1;

        int end=5;

        while(start<=end) {

            int square=start*start;

            System.out.println(start+" squareRoot= "+square);

            start++;

        }

    }

}
```

OUTPUT

```
1 squareRoot= 1

2 squareRoot= 4

3 squareRoot= 9

4 squareRoot= 16

5 squareRoot= 25
```

16. write a Java Program to Print 6th Tabel

```java
public class Program16 {

    public static void main(String[] args) {

        int start=1;

        int end=10;

        int number=6;

        while(start<=end) {

            int tables=start*number;

            System.out.println(start+" * "+number+" = "+tables);

            start++;

        }

    }

}
```

OUTPUT

```
1 * 6 = 6

2 * 6 = 12

3 * 6 = 18

4 * 6 = 24

5 * 6 = 30

6 * 6 = 36

7 * 6 = 42

8 * 6 = 48

9 * 6 = 54

10 * 6 = 60
```

17. write a Java Program to Print Even & Odd Numbers

```java
public class Program17 {

    public static void main(String[] args) {

        int a=1;

        int b=10;

        while(a<=b) {

            if(a%2==0) {

                System.out.println("Even Number: "+a);

            }

            else {

                System.out.println("Odd Number : "+a);

            }

            a++;

        }

    }

}
```

OUTPUT

```
Odd Number : 1

Even Number: 2

Odd Number : 3

Even Number: 4

Odd Number : 5

Even Number: 6

Odd Number : 7

Even Number: 8

Odd Number : 9

Even Number: 10
```

18. write a Java Program to find Factorial of 5

```java
public class Program18 {

    public static void main(String[] args) {

        int n=5;

        int fact=1;

        while(n>0){

            fact=fact*n;

            n--;

        }

        System.out.println("5 Factorial: "+fact);

    }

}
```

OUTPUT

```
5 Factorial = 120
```

19. write a Java Program to find Sum of all Number, Sum of all Even Number ,Sum of all Odd Number

```java
public class Program19 {

    public static void main(String[] args) {

        int n=10;

        int sum=0;

        int evensum=0;

        int oddsum=0;

        while(n>0){

            sum=sum+n;

            if(n%2==0) {
```

```java
                evensum=evensum+n;
            }
            else {
                oddsum=oddsum+n;
            }
            n--;
        }
        System.out.println("Sum of 10      : "+sum);
        System.out.println("EvenSum of 10 : "+evensum);
        System.out.println("OddSum of 10   : "+oddsum);
    }
}
```

20. write a Java Program to find 3^4

```java
public class Program20 {
    public static void main(String[] args) {
        int base=3;
        int power=4;
        int result=1;
        while(power>0) {
            result=result*base;
            power--;
        }
        System.out.println(result);
    }
}
```

21. write a Java Program to Fibonaci Series

```java
public class Program21 {

    public static void main(String[] args){

        int n=5;

        int fib1=0;

        int fib2=1;

        int fib3=fib1+fib2;

        while(n>0){

            System.out.println(fib1);

            fib1=fib2;

            fib2=fib3;

            fib3=fib1+fib2;

            n--;

        }

    }

}
```

OUTPUT

0

1

1

2

3

22. Write a Java Program to convert Decimal to Binary. 45

```java
public class Program22 {

    public static void main(String[] args) {

        int num=45;

        String bin=" ";

        while(num>0) {

            int rem=num%2;

            bin=rem+bin;

            num=num/2;

        }

        System.out.print(bin);

    }

}
```

OUTPUT

```
101101
```

23. Write a Java Program to Find Count Of Digits

```java
public class Program23 {

    public static void main(String[] args) {

        int num=38765;

        int digits=0;

        do {

            digits++;

            num=num/10;

        }while(num>0);

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

```
        }

}
```

5

24. Write a Java Program to Print Reverse Numbers

```java
public class Program24 {

    public static void main(String[] args) {

        int num=2874;

        int rev=0;

        while(num>0) {

            int last=num%10;

            rev=rev*10+last;

            num=num/10;

        }

        System.out.println(rev);

    }

}
```

OUTPUT

4782

25. Write a Java Program to Number Palindrome.

```java
public class Program26 {

    public static void main(String args[]){

        int n=454;

        int sum=0;

        int temp=n;
```

```java
        while(n>0){

            int r=n%10;

            sum=(sum*10)+r;

            n=n/10;

        }

        if(temp==sum) {

            System.out.println("palindrome number ");

        }

        else {

            System.out.println("not palindrome");

        }

    }

}
```

26. Write a Java Program to Swap 2 No's without Using 3rd /Extra/temp Variable.

```java
public class Program28 {

    public static void main(String[] args) {

        int a=10;

        int b=20;

        System.out.println("Before Swaping 'a'= "+a);

        System.out.println("Before Swaping 'b'= "+b);

        a=a+b;

        b=a-b;

        a=a-b;

        System.out.println();
```

```java
        System.out.println("After Swaping 'a'= "+a);

        System.out.println("After Swaping 'b'= "+b);

    }

}
```

OUTPUT

```
Before Swaping 'a'= 10

Before Swaping 'b'= 20

After Swaping 'a'= 20

After Swaping 'b'= 10
```

27. Write a Java Program to Swap 2 No's with Using 3rd /Extra/temp Variable.

```java
public class Program29 {

    public static void main(String[] args) {

        int a=10;

        int b=20;

        System.out.println("Before Swaping 'a' = "+a);

        System.out.println("Before Swaping 'b' = "+b);

        int temp=a;

        a=b;

        b=temp;

        System.out.println("After Swaping 'a' = "+a);

        System.out.println("After Swaping 'b' = "+b);

    }

}
```

28. Write a Java Program to Add two Numbers Without Using '+' Operator.

```java
public class Program30 {
    public static void main(String[] args) {
        int x=4;
        int y=3;
        while(x>0) {
            y++;
            x--;
        }
        System.out.println(y);
    }
}
```

OUTPUT

7

29.Write a java Program to given number is prime number or not.

```java
public class PrimeNumber1 {
    public static void main(String[] args) {
        int n=5;
        int count=0;
        for(int i=1; i<=n; i++) {
            if(n%i==0) {
                count++;
            }
        }
```

```java
        if(count==2) {

            System.out.println("is prime number");

        }

        else {

            System.out.priantln("is not prime number");

        }

    }

}
```

OUTPUT

```
5 is prime number
```

30.Write a java Program to given number is Strong Number or not.

```java
public class StrongNumber {

    public static void main(String[] args) {

        int inputNumber = 145;

        int temp = inputNumber;

        int sum = 0;

        while(inputNumber>0) {

            int num=inputNumber%10;

            int fact=1;

            while(num>0) {

                fact=fact*num;

                num=num-1;

            }

            sum=sum+fact;

            inputNumber=inputNumber/10;
```

```java
        }

        if(temp==sum) {

            System.out.println("Is a Strong Number");

        }

        else {

            System.out.println("Is Not a Strong Number");

        }

    }

}
```

31.Write a java Program to given number is Amstrong Number or not.

```java
public class AmstrongNumber {

    public static void main(String[] args) {

        int num=153;

        int amstrong=0;

        int temp=num;

        do {

            int rem=num%10;

            amstrong=amstrong+(rem*rem*rem);

            num=num/10;

        }while(num>0);

        if(amstrong==temp) {

            System.out.println(temp+" is a Amstrong Number");

        }

        else {
```

```
            System.out.println(temp+" is a not Amstrong Number");

        }

    }

}
```

OUTPUT:

153 is a Amstrong Number

32.write a Java Program to Print Given Pattern

```
        *
      * * *
    * * * * *
  * * * * * * *
* * * * * * * * *
```

```java
public class TrianglePattern {

    public static void main(String[] args) {

        int rows = 5;

        int k = 0;

        for (int i = 1; i <= rows; i++, k = 0) {

            for (int j = 1; j <= rows - i; j++) {

                System.out.print(" ");

            }

            while (k != 2 * i - 1) {

                System.out.print("* ");

                k++;

            }

            System.out.println();

        }
```

```
        }
}
```

33.Program to swap an Array of equal size

```java
public class Progrm01 {

    public static void main(String[] args) {

        int[] arr1 = {1,2,5};

        int[] arr2 = {3,6,7};

        int[] arr3 = new int[arr1.length];

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

        for (int i = 0; i < arr1.length; i++) {

            System.out.print(arr1[i]+" ");

        }

        System.out.println();

        for (int i = 0; i < arr3.length; i++) {

            System.out.print(arr2[i]+" ");

        }

        for (int i = 0; i < arr1.length; i++) {

            arr3[i]=arr1[i];

        }

        for (int i = 0; i < arr2.length; i++) {

            arr1[i]=arr2[i];

        }

        for (int i = 0; i < arr3.length; i++) {

            arr2[i]=arr3[i];
```

```java
        }

        System.out.println();

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

        for (int i = 0; i < arr1.length; i++) {

            System.out.print(arr1[i]+" ");

        }

        System.out.println();

        for (int i = 0; i < arr2.length; i++) {

            System.out.print(arr2[i]+" ");

        }

    }

}
```

OUTPUT:

Before Swapping

1 2 5

3 6 7

After swaping

3 6 7

1 2 5

34.Merge 2 sorted integer Array into 1 Array

```java
public class MergeTwoArrays {

    public static void main(String[] args) {

        int[] array1= {4,2,8,9,10};

        int[] array2= {1,7,3,6,5};
```

```java
        int[] array3=new int[array1.length+array2.length];

        int p=0;

        for(int i=0; i<array1.length; i++) {

            array3[p]=array1[i];

            p++;

        }

        for(int i=0; i<array2.length; i++) {

            array3[p]=array2[i];

            p++;

        }

        for(int i=0; i<array3.length; i++) {

            for(int j=i; j<array3.length; j++) {

                if(array3[i]>array3[j]) {

                    int temp=array3[i];

                    array3[i]=array3[j];

                    array3[j]=temp;

                }

            }

            System.out.print(array3[i]+" ");

        }

    }

}
```

OUTPUT:

1 2 3 4 5 6 7 8 9 10

35. Write a Java Program to Find Biggest Element an Given Array 45,2,67,89,65,71

```java
public class BiggestElementInArray {

    public static void main(String[] args) {

        int[] array= {45,2,67,43,89,65,71};

        int max=array[0];

        for(int i=1; i<array.length; i++) {

            if(array[i]>max) {

                max=array[i];

            }

        }

        System.out.println("Biggest Element: "+max);

    }

}
```

OUTPUT:

Biggest Element: 89

36.Write a Java Program to Find Smallest Element an Given Array 45,2,67,89,65,71

```java
public class SmallestElementInArray {

    public static void main(String[] args) {

        int[] array= {45,2,67,43,89,65,71};

        int small=array[0];

        for(int i=1; i<array.length; i++) {

            if(array[i]<small) {
```

```
                    small=array[i];
                }
            }
            System.out.println("Smallest Element: "+small);
        }
    }
}
```

OUTPUT:

Smallest Element: 2

37.Write a Java Program to Find Even Sum Given Array
76,45,35,76,98,12,43,56,76,78,23

```java
public class SumOfEvenNumber {
    public static void main(String[] args) {
        int[] arr={76,45,35,76,98,12,43,56,76,78,23};
        int even=0;
        for(int i=0; i<arr.length; i++) {
            if(arr[i]%2==0) {
                even=arr[i]+even;
            }
        }
        System.out.println("SumOfEvenNumber= "+even);
    }
}
```

OUTPUT:

SumOfEvenNumber= 472

38.Write a Java Program to Find Even Number an Given Array 34,65,78,97,34,67,24,35,90,65

```java
public class EvenNumber {

    public static void main(String[] args) {

        int[] array= {34,65,78,97,34,67,24,35,90,65};

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

            if(array[i]%2==0) {

                System.out.println(array[i]);

            }

        }

    }
}
```

OUTPUT:

34

78

34

24

90

39.Write a Java Program to Sort Assending Order an Given Array 98,45,67,34,87,23,13

```java
public class AssendingOrever {

    public static void main(String[] args) {

        int[] array= {98,45,67,34,87,23,13};

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

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

            System.out.print(array[i]+" ");

        }

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

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

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

                    int temp=array[i];

                    array[i]=array[j];

                    array[j]=temp;

                }

            }

        }

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

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

            System.out.print(array[i]+" ");

        }

    }

}
```

OUTPUT:

Before Sorting

98 45 67 34 87 23 13

After Sorting

13 23 34 45 67 87 98

40.Write a Java Program to Sort Decending Order an Given Array 34,12,43,13,45,76,87,35,67

```java
public class SortingDecendingOrder {

    public static void main(String[] args) {

        int[] array= {34,12,43,13,45,76,87,35,67};

        System.out.println("Before Sorting");

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

            System.out.print(array[i]+" ");

        }

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

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

                if(array[i]<array[j]) {

                    int temp=array[i];

                    array[i]=array[j];

                    array[j]=temp;

                }

            }

        }

        System.out.println("After Sorting");
```

```java
        for(int i=0; i<array.length; i++) {

            System.out.print(array[i]+" ");

        }

    }

}
```

OUTPUT:

Before Sorting

34 12 43 13 45 76 87 35 67

After Sorting

87 76 67 45 43 35 34 13 12

41.Write a Java Program to Swap First and Last Element an Given Array 5,2,3,4,1

```java
public class SwapFirstAndLastElementinArray {

    public static void main(String[] args) {

        int[] array= {5,2,3,4,1};

        int size=array.length;

        int temp=array[0];

        array[0]=array[size-1];

        array[size-1]=temp;

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

            System.out.print(array[i]+" ");

        }

    }

}
```

OUTPUT:

1 2 3 4 5

42.Write a Java Program to Reverse an Given Array 10,20,30,40,50

```java
import java.lang.reflect.Array;

public class ReverseArray {

    public static void main(String[] args) {

        int[] array={10,20,30,40,50,60,70,80,90};

        System.out.println("Before");

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

            System.out.print(array[i]+" ");

        }

        System.out.println();

        System.out.println("After");

        for(int i=array.length-1; i>=0; i--) {

            System.out.print(array[i]+" ");

        }

    }

}
```

OUTPUT:

Before

10 20 30 40 50 60 70 80 90

After

90 80 70 60 50 40 30 20 10

43.Write a Java Program to Reverse an Given Array 10,20,30,40,50

```java
import java.lang.reflect.Array;

public class ReverseArray {

    public static void main(String[] args) {

        int[] array1={10,20,30,40,50};

        int i=0;

        int j=array1.length-1;

        while(i<=j) {

            int temp=array1[i];

            array1[i]=array1[j];

            array1[j]=temp;

            i++;

            j--;

        }

        for(i=0; i<array1.length; i++) {

            System.out.print(array1[i]+" ");

        }

    }

}
```

OUTPUT:

50 40 30 20 10

44.Write a Java Program to Find Frequency of Given Array 1,3,4,6,4,6,3,8,1,9,1,2,3,4.

```java
public class DublicatValue {

    public static void main(String[] args) {

        int[] array= {1,3,4,6,4,6,3,8,1,9,1,2,3,4};

        int[] freq=new int[array.length];

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

            int no=array[i];

            int count=1;

            for(int j=i+1; j<array.length; j++) {

                if(no==array[j]) {

                    count++;

                    freq[j]=-1;

                }

            }

            if(freq[i]!=-1) {

                freq[i]=count;

            }

        }

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

            if(freq[i]>0) {

                System.out.println(array[i]+" Occurs "+freq[i]+" times");

            }

        }

    }

}
```

```
}
```

OUTPUT:

1 Occurs 1 times

3 Occurs 3 times

4 Occurs 3 times

6 Occurs 2 times

8 Occurs 1 times

9 Occurs 1 times

2 Occurs 1 times

45.Write a Program to find 3rd largest,2nd lasrgest,3rd smallest,2nd smallest element in an given array 10, 45, 5, 6, 12, 43, 1, 9.

```java
public class LastgestAndSmallest {

    public static void main(String[] args) {

        int[] array = new int[] { 10, 45, 5, 6, 12, 43, 1, 9 };

        int temp = 0;

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

            for (int j = i + 1; j < array.length; j++) {

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

                    temp = array[i];

                    array[i] = array[j];

                    array[j] = temp;

                }

            }

        }

        int size=array.length;
```

```java
        for (int i = 0; i < array.length; i++) {

            System.out.print(array[i] + " ");

        }

        System.out.println();

        System.out.println("3rd smallest Element: "+array[2]);

        System.out.println("3rd Largest Element : "+array[size-3]);

        System.out.println("2nd smallest Element: "+array[1]);

        System.out.println("2nd Largest Element : "+array[size-2]);

    }

}
```

OUTPUT:

```
3rd smallest Element: 6

3rd Largest Element : 12

2nd smallest Element: 5

2nd Largest Element : 43
```

STRING PROGRAMS

```java
//1. CharAt()

public class StringProgram {

    public static void main(String[] args) {

        String str="Developer";

        System.out.println(str.charAt(4));

        System.out.println(str.charAt(3));

        System.out.println(str.charAt(0));

    }
```

```
}
```

OUTPUT:

l

e

D

//2.length()

```java
public class StringProgram {

    public static void main(String[] args) {

        String str1="Qspiders";

        System.out.println(str1.length());

        String str2="java_8";

        System.out.println(str2.length());

        String str3="Software Engineer";

        System.out.println(str3.length());

    }
}
```

OUTPUT:

8

6

17

//3.toCharArray()

```java
public class StringProgram {

    public static void main(String[] args) {

        String s1="Testing";

        char[] ch=s1.toCharArray();
```

```java
        for(int i=0; i<ch.length; i++) {

            System.out.println(ch[i]);

        }

    }

}
```

OUTPUT:

T

e

s

t

i

n

g

```java
// 4.IndexOf()

public class StringProgram {

    public static void main(String[] args) {

        String s2="Developer";

        System.out.println(s2.indexOf('v'));

        System.out.println(s2.indexOf('l'));

        System.out.println(s2.indexOf('h'));

        int a=s2.indexOf('e');

        int b=s2.indexOf('e',a+1);

        int c=s2.indexOf('e',b+1);

        System.out.println("1st: "+a+" 2nd: "+b+" 3rd: "+ c);

    }
```

}

OUTPUT:

2

4

-1

1st: 1 2nd: 3 3rd: 7

// 5.Last IndexOf

```java
public class StringProgram {
    public static void main(String[] args) {
        String s3="Developer";
        System.out.println(s3.lastIndexOf('p'));
        System.out.println(s3.lastIndexOf('D'));
        System.out.println(s3.lastIndexOf('e'));
    }
}
```

OUTPUT:

6

0

7

// 6.Contains()

```java
public class StringProgram {
    public static void main(String[] args) {
        String s4="Enginear";
        System.out.println(s4.contains("job"));
        System.out.println(s4.contains("gin"));
```

```
        }
}
```

OUTPUT:

false

true

// 7.startWith()

```
public class StringProgram {

    public static void main(String[] args) {

        String s5="computer";

        System.out.println(s5.startsWith("com"));

        System.out.println(s5.startsWith("om"));

        System.out.println(s5.startsWith("comp"));

    }
}
```

OUTPUT:

true

false

true

// 8. EndsWith()

```
public class StringProgram {

    public static void main(String[] args) {

        String s6="Developer";

        System.out.println(s6.endsWith("per"));

        System.out.println(s6.endsWith("lope"));

        System.out.println(s6.endsWith("er"));
```

```
        }
}
```

OUTPUT:

true

false

true

```
// 9.Equals()
public class StringProgram {
    public static void main(String[] args) {
        String s7="java";
        System.out.println(s7.equals("java"));
        System.out.println(s7.equals("tough"));
        System.out.println(s7.equals("Java"));
    }
}
```

OUTPUT:

true

false

false

```
//10.EqualsIgnoreCase()
public class StringProgram {
    public static void main(String[] args) {
        String s8="python";
        System.out.println(s8.equalsIgnoreCase("Python"));
        System.out.println(s8.equalsIgnoreCase("tough"));
```

```java
        System.out.println(s8.equalsIgnoreCase("python"));

    }

}
```

OUTPUT:

true

false

true

//11.toUpperCase()

```java
public class StringProgram {

    public static void main(String[] args) {

        String s9="tamizh";

        System.out.println(s9.toUpperCase());

    }

}
```

OUTPUT:

TAMIZH

//12.toLowerCase()

```java
public class StringProgram {

    public static void main(String[] args) {

        String s10="TAMIZH";

        System.out.println(s10.toLowerCase());

    }

}
```

OUTPUT:

tamizh

//13.trim()

```java
public class StringProgram {

    public static void main(String[] args) {

        String s11="   Core Java ";

        System.out.println(s11);

        System.out.println(s11.trim());

    }

}
```

OUTPUT:

```
   Core Java
Core Java
```

//14.subString()

```java
public class StringProgram {

    public static void main(String[] args) {

        String s12="developer";

        System.out.println(s12.substring(6));

        System.out.println(s12.substring(3,8));

        System.out.println(s12.substring(0,7));

    }

}
```

OUTPUT:

per

elope

develop

```java
// 15.Split()
 public class StringProgram {
     public static void main(String[] args) {
         String s13="Qspider Software Training center";
         String[] arr=str.split(" ");
         for(int i=0; i<arr.length; i++) {
             System.out.print(arr[i]+" , ");
         }
     }
 }
```

OUTPUT:

Qspider , software , Training , center ,

Check given Number is Binary Number or Not

```java
public class BinaryOrNot {
    public static void main(String[] args){
        String str ="101010";
        boolean data = false;
        for (int i = 0; i < str.length(); i++) {
            if (str.charAt(i)=='0'||str.charAt(i)=='1') {
                data = true;
            }
```

```java
        else{
            data = false;
            break;
        }
    }
    if (data) {
        System.out.println("Binary");
    }
    else {
        System.out.println("Is Not Binary");
    }
  }
}
```

OUTPUT:

101010 : Binary

Check given string contains only numbers or not.

```java
public class NumberOrNot {
    public static void main(String[] args) {
        String s = "abc12abc";
        boolean data = false;
        for (int i= 0;i < s.length(); i++) {
            if (s.charAt(i)>='0'&& s.charAt(i)<='9') {
                data = true;
            }
            else {
```

```java
                data = false;

                break;

            }

        }

        if (data) {

            System.out.println("Number");

        }

        else {

            System.out.println("Not A Number");

        }

    }

}
```

OUTPUT:

Not A Number

Write a Java Program to How to Remove Empty Space in String.

```java
public class RemoveWhiteSpace {

    public static void main(String[] args) {

        String str="Remove white spaces";

        str = str.replaceAll("\\s+", "");

        System.out.println("String after removing all the white spaces : "
    + str);

    }

}
```

OUTPUT:

String after removing all the white spaces : Removewhitespaces

Write a Java Program to How to Remove Empty Space in String.

```java
public class Program22 {

    public static void main(String[] args) {

        String str="Chennai City of India";

        char[] ch=str.toCharArray();

        str="";

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

            if(ch[i]!=' ') {

                str=str+ch[i];

            }

        }

        System.out.println(str);

    }

}
```

Output:

ChennaiCityofIndia

Write a Java Program to Count the Total Number Of Character present in a String .

```java
public class NumberOfCharacter {

    public static void main(String[] args) {

        String str = "India is The best Country in a world";

        int count = 0;

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

            if(str.charAt(i) != ' ') {

                count++;
```

```
        }

    }

    System.out.println("Total number of characters: " + count);

  }

}
```

```
Total number of characters: 29
```

Write a Java Program to Count the Total Number Of Vowels & Consonents present in a String .

```java
public class VowelsAndConsonents {

    public static void main(String[] args) {

        int vowels = 0;

        int consonents = 0;

        String str = "This is a really simple sentence";

        str = str.toLowerCase();

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

            if(str.charAt(i) == 'a' || str.charAt(i) == 'e' ||
            str.charAt(i) == 'i' || str.charAt(i) == 'o' || str.charAt(i) ==
            'u') {

                vowels++;

            }

            else if(str.charAt(i) >= 'a' && str.charAt(i)<='z') {

                consonents++;

            }

        }

        System.out.println("Number of vowels: " + vowels);
```

```java
            System.out.println("Number of consonants: " + consonents);
    }

}
```

Number of vowels: 10

Number of consonants: 17

Write a Java Program to Replace a LowerCase into UpperCase and Vice Versa in a String .

```java
public class LoverCharIntoUpperChar {

    public static void main(String[] args) {

        String str1="Great Power";

        StringBuffer newStr=new StringBuffer(str1);

        for(int i = 0; i < str1.length(); i++) {

            if(Character.isLowerCase(str1.charAt(i))) {

            newStr.setCharAt(i, Character.toUpperCase(str1.charAt(i)));

            }

            else if(Character.isUpperCase(str1.charAt(i))) {

            newStr.setCharAt(i, Character.toLowerCase(str1.charAt(i)));

            }

        }

        System.out.println("String after case conversion : " + newStr);

    }

}
```

String after case conversion : gREAT pOWER

Write a Java Program to String Palindrome.

```java
import java.util.Scanner;

public class Program27 {

    public static void main(String[] args) {

        Scanner in=new Scanner(System.in);

        System.out.print("Enter a String: ");

        String str=in.next();

        String reverse="";

        int length=str.length();

        for(int i=length-1; i>=0; i--) {

            reverse=reverse+str.charAt(i);

        }

        if(str.equals(reverse)) {

            System.out.println("Is a Palindrome");

        }

        else {

            System.out.println("Is not a Palindrome");

        }

    }

}
```

OUTPUT

Enter a String: MADAM

Is a Palindrome

Write a Java Program to Reverse String.

```java
public class ReverseString {

    public static void main(String[] args) {

        String str="Chennai";

        char[] ch=str.toCharArray();

        str=" ";

        for(int i=ch.length-1; i>=0; i--) {

            str=str+ch[i];

        }

        System.out.println(str);

    }

}
```

OUTPUT:

iannehC

Java Program to find the maximum and minimum occurring character in a string

```java
import java.util.*;

public class MaximumAndMinimium{

    public static void main(String[] args) {

        Scanner sc=new Scanner(System.in);

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

        String str=sc.nextLine();

        int[] freq = new int[str.length()];

        char minChar = str.charAt(0);

        char maxChar = str.charAt(0);

        int min;

        int max;

        char string[] = str.toCharArray();

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

            freq[i] = 1;

            for(int j = i+1; j < string.length; j++) {

                if(string[i] == string[j] && string[i] != ' ' &&
            string[i] != '0')

                {

                freq[i]++;

                string[j] = '0';

                }

            }

        }

    }

    min = max = freq[0];
```

```java
        for(int i = 0; i <freq.length; i++) {

            if(min > freq[i] && freq[i] != '0') {

                min = freq[i];

                minChar = string[i];

            }

            if(max < freq[i]) {

                max = freq[i];

                maxChar = string[i];

            }

        }

        System.out.println("Minimum occurring character: " + minChar);

        System.out.println("Maximum occurring character: " + maxChar);

        }

}
```

OUTPUT:

Enter the string:

hello world

Minimum occurring character: h

Maximum occurring character: l

Java Program to find the Dublicate word in a String .

```java
public class DuplicateWord {

    public static void main(String[] args) {

        String string = "Big black bug bit a big black dog on his big black nose";

        int count;

        string = string.toLowerCase();

        String words[] = string.split(" ");

        System.out.println("Duplicate words in a given string : ");

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

            count = 1;

            for(int j = i+1; j < words.length; j++) {

                if(words[i].equals(words[j])) {

                    count++;

                    words[j] = "0";

                }

            }

            if(count > 1 && words[i] != "0") {

                System.out.println(words[i]);

            }

        }

    }

}
```

OUTPUT:

Duplicate words in a given string :

big

black

Java Program to find the Frequency Of Character in a String .

```java
public class FrequencyCharacter{

    public static void main(String[] args) {

        String str = "picture perfect";

        int[] freq = new int[str.length()];

        char string[] = str.toCharArray();

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

            freq[i] = 1;

            for(int j = i+1; j <str.length(); j++) {

                if(string[i] == string[j]) {

                    freq[i]++;

                    string[j] = '0';

                }

            }

        }

        System.out.println("Characters and their corresponding frequencies");

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

            if(string[i] != ' ' && string[i] != '0') {

                System.out.println(string[i] + "-" + freq[i]);

            }

        }

    }
```

```
        }
}
```

```
Characters and their corresponding frequencies

p-2

i-1

c-2

t-2

u-1

r-2

e-3

f-1
```

Java Program to Reverse a String in java word by word .

```java
import java.util.Scanner;

public class ReverseStringWordByWordProgram {

    public static String reverseTheSentence(String inputString){

        String[] words = inputString.split("\\s");

        String outputString = "";

        for (int i = words.length-1; i >= 0; i--){

            outputString = outputString + words[i] + " ";

        }

        return outputString;

    }

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

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

        System.out.println("Enter Input String :");

        String inputString = sc.nextLine();

        String outputString = reverseTheSentence(inputString);

        System.out.println("Input String : "+inputString);

        System.out.println("Output String : "+outputString);

        sc.close();

    }

}
```

OUTPUT:

Enter Input String :

hello world

Input String : hello world

Output String : world hello