

## JAVA PROGRAMMING

1) Write a program to reverse a word using loop.

```
import java.util.Scanner,
```

```
Public class reverseword {
```

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

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

```
        System.out.print ("Enter a word to reverse:");
```

```
        String name = input.nextLine();
```

```
        String reversed = "";
```

```
        For (int i = name.length() - 1; i >= 0; i--) {
```

```
            reversed = reversed + name.charAt(i);
```

```
        }
```

```
    }
```

```
    System.out.println ("Reversed Word: " + reversed);
```

```
}
```

```
}
```

2) Write an ~~username~~ program to check the entered username is valid or not.

```
import java.util.Scanner;
```

```
Public class UsernameValidator {
```

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

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

```
        System.out.println ("Enter the user name:");
```

```
        String Username1 = input.nextLine();
```

```
        System.out.println ("Reenter the user name:");
```

```
        String Username2 = input.nextLine();
```

```
        If (Username1.equals (Username2)) {
```

```
            System.out.println ("Reenter the user name:");
```

```
            System.out.println ("User name is valid");
```

```
        } else {
```

```
            System.out.println ("User name is invalid");
```

```
        }
```

```
    }
```

```
}
```

2) Write a program to reverse a number using loop?

```
import java.util.Scanner;
```

```
public class reverseNumber {
```

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

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

```
        System.out.println("Enter a number to reverse:");
```

```
        int n = input.nextInt();
```

```
        int rev = 0;
```

```
        while (n != 0) {
```

```
            int rem = n % 10;
```

```
            rev = rev * 10 + rem;
```

```
            n = n / 10;
```

```
        }
```

```
        System.out.println("Reverse Number: " + rev);
```

```
    }
```

```
}
```

4) Write a program to find whether the person is eligible for vote or not.

```
import java.util.Scanner;

Public class VoterEligibility {

    Public static void main(String [] args) {
        Scanner input = new Scanner(System.in);
        System.out.println("Enter your age:");
        int age = input.nextInt();

        If (age > 18) {
            System.out.print("You are eligible to vote:");
        }
        Else if (age <= 0) {
            System.out.print("You are allowed to vote
after" + (18 - age) + " Years");
        }
    }
}
```



5) Find the LCM and GCD of n numbers.

```
import java.util.Scanner;
```

```
Public class main {
```

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

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

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

```
        int n = input.nextInt();
```

```
        int n[] numbers = new int[n];
```

```
        System.out.println("Enter the numbers:");
```

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

```
            numbers[i] = input.nextInt();
```

```
        }
```

```
        int lcm = numbers[0];
```

```
        int gcd = numbers[0];
```

```
        }
```

```
        System.out.print("LCM of the numbers: " + lcm);
```

```
        System.out.print("GCD of the numbers: " + gcd);
```

```
        }
```

```
    Public static int findGCD (int a, int b) {
```

```
        if (b==0) {
```

```
            return a;
```

```
        }
```

```
        return findGCD (b, a%b);
```

```
    }
```

```
}
```

6) Write a program to print right triangle star pattern.

```
import java.util.Scanner;
```

```
public class righttriangle {
```

```
    public static void starRightTriangle (int n)
```

```
    {
```

```
        int a, b;
```

```
        for (a=0; a<n; a++) {
```

```
            for (b=0; b<=a; b++) {
```

```
                System.out.print ("x");
```

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

```
        }
```

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

```
    {
        int x=5;
```

```
        starRightTriangle (x);
```

```
    }
```

```
}
```

7) Write a program to print below pattern?

```
import java.util.Scanner;
```

```
class GFG {
```

```
    public static void printPascal (int n)
```

```
    {
```

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

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

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

```
            }
```

```
            int x = 1;
```

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

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

```
                x = x * (i - k) / k;
```

```
            }
```

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

```
        }
```

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

```
    {
```

```
        int n = 4;
```

```
        printPascal(n);
```

```
    }
```

```
}
```

8. Write a program using function to calculate the simple interest.

```
import java.util.Scanner;  
  
Public class SimpleInterestCalculator {  
    Public static void main(String[] args) {  
        Scanner input = new Scanner(System.in);  
        System.out.print("Enter the principal amount :");  
        int pri = input.nextInt();  
        System.out.print("is the customer a senior citizen (Y/N):");  
        char age = input.next().charAt(0);  
        double interest = 0.0;  
        If (age == 'Y') {  
            interest = (Pri * Year * 0.12) / 100;  
            System.out.print("interest:" + interest);  
        } else {  
            interest = (Pri * Year * 0.1) / 100;  
            System.out.print("interest:" + interest);  
        }  
    }  
}
```



9) write a program to find even sum of fibonacci series

```
import java.util.Scanner;

public class Fibonacci {
    public static void main (String [] args) {
        int n = 10;
        int a1 = 0, a2 = 1, a3;
        int a[] = new int [50];
        for (int i = 0; i < 10; i++)
        {
            a[i] = a1;
            System.out.println(a[i] + " ");
            a3 = a1 + a2;
            a1 = a2;
            a2 = a3;
        }
        int sum = 0;
        for (int i = 0; i < n * 2; i = i + 2)
        {
            sum = sum + a[i];
        }
        System.out.println("\nSum: " + sum);
    }
}
```

10) write a program to print the numbers from M to N by skipping k numbers.

```
public class SkipNumbers {
```

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

```
        int M = 50;
```

```
        int N = 100;
```

```
        int k = 7;
```

```
        for (int i = M; i <= N; i += k) {
```

```
            System.out.print(i + ",");
```

```
        }
```

```
        }
```

```
    }
```