Name : S. V. Tanushri

Reg No : 192321163

Date : 24/07/2024

Sub Code : CSA099

Course : Java Programming.

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

CODE:-

```java
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:");
        String name = input.nextLine();
        String reversed ="";
        for (int i = name.length()-1; i <= 0; i--)
        {
            reversed = reversed + name.charAt(i);
        }
        System.Out.println ("Reverse word:" + reversed);
    }
}
```

2. Write a program to check the entered user name is valid or not.

CODE:-

```java
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 ("Enter the user name:");
        String userName2 = input.nextLine();
        if (userName1.equals (userName2))
        {
```

```java
            System.out.println("user name is valid");
    }
    else
    {
        System.out.println("user name is invalid");
    }
  }
}
```

3. Write a program to reverse a number using loop?

CODE :-

```java
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.

CODE:-

```java
import java.util.Scanner;
public class VoteEligibility
{
    public static void main (String[] args)
    {
        Scanner input = new Scanner (System.in);
        System.out.print(" 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("Enter the age :");
        } else {
            System.out.print(" You are allowed to
                    Vote after "+ (18-age)+ "years.");
        }
    }
}
```

5. Find the LCM and GCD of n numbers.

CODE:-

```java
import java.util.Scanner;
public class Main
{
    public static void main (String []args)
    {
        Scanner input = new Scanner (System.in);
```

```java
        System.out.print("Enter the number
                         of elements: ");
        int n = input.nextInt();
        int[] 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];
        for (int i=1; i<n; i++)
        {
            lcm = findLCM(lcm, numbers[i]);
            gcd = findGCD(gcd, numbers[i]);
        }
        System.out.println("LCM of the numbers:" +
                            lcm);
        System.out.println("GCD of the numbers:"
                            + gcd);
    }
    public static int findLCM(int a, int b)
    {
        return a * b / findGCD(a,b);
    }
    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.

CODE:-

```java
import java.util.Scanner;
Public Class GeeksForGeeks
{
    Public Static Void StarRightTriangle (int n)
    {
        int a,b;
        for(a=0; a<n; a++)
        {
            for(b=0; b<=a; b++)
            {
                System.out.print(" * ");
            }
            System.out.println();
        }
    }
    Print Static Void main(String args[])
    {
        int k=5;
        StarRightTriangle(k);
    }
}
```

7. Write a program to print the below Pattern.

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

```java
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-i; 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.

CODE:—

```java
import java.util.Scanner;
Public class SimpleInterest Calculator
{
    Public Static void main (String[]args)
    {
        Scanner input = new Scanner (System.in);
        System.out.Print("Enter the Principal
                                    amount:");
        int Pri = input.next int();
        System.Out.Print("Enter the number
                            of years:");
        int year = input.next int();
        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. Java program to find even sum of Fibonacci Series Till number N?

CODE :-

```java
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.Print(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("in Sum: "+Sum);
    }
}
```

10. Write a Program to Print the numbers from M to N by skipping k numbers in between?

CODE:-

```java
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 + ", ");
        }
    }
}
```