CSA-0993 PROGRAMMING IN JAVA FOR APPLICATION DEVELOPMENT

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1. REVERSE A WORD USING LOOP :-

```java
import java.util.Scanner
class Java{
        public static void main (String [] args){
            Scanner input = new Scanner (System.in);
            String name = input.nextline ();
            String empty = "";
            int len = name.length ();
            for (int i = len-1; i >= 0; i --)
            {
                empty = empty + name.charAt (i);
            }
            System.out.print (empty);
        }
}
```

OUTPUT :-
Sabarish
hsirabas

2. CHECK THE ENTERED USER NAME IS VALID or NOT :-

```java
import java.util.Scanner;
class Java {
    public static void main( String [] args) {
        Scanner input = new Scanner (System .in);
        String S1 = input. nextLine ();
        String S2 = input. nextLine ();
        if (S1 == S2)
            System. out. print ("user name valid");
        else
            System. out. print ("user name not valid);
    }
}
```

OUTPUT :-

Saveetha@789

Saveetha@789

user name valid.

3. REVERSE NUMBER :-

```java
import java.util.Scanner;

class Java {
    public static void main (String[] args) {
        Scanner input = new Scanner (System.in);
        int n = input.nextInt();
        int rev = 0;
        while (n != 0)
        {
            int rem = n % 10;
            rev = rev * 10 + rem;
            n = n / 10;
        }
        System.out.print (rev);
    }
}
```

OUTPUT :-

7890

0987

A) VOTING

```java
import java.util.Scanner;
class Java {
    public static void main (String [] args) {
        Scanner input = new Scanner (System.in);
        int age = input.nextInt()
        if (age >=18)
            System.out.print ("you are eligible for vote);
        else if (age <=0)
            System.out.print (" Enter the age correctly");
        else
            System.out.print (" your allowed to vote after" + (18-age
```

OUTPUT:-

```
20
You are eligible for vote.
```

5) LCM & GCD :-

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

        System.out.print ("Enter the number of elements ;");
        int n = input.nextInt();
        int[] numbers = new Int [n];
        for (int i=0; i<n; i++) {
            System.out.print (" Enter number" + (i+1) + ":");
            numbers[i]= input.nextInt();

        }
```

```java
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=" + lcm);
System.out.print("GCD=" + 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);
}

}
```

OUTPUT :-

```
Enter the number of elements : 3
Enter number 1: 9
Enter number 2 : 12
Enter number 3 : 15
LCM = 180
GCD = 3
```

6. RIGHT TRIANGLE PATTERN :-

```java
import java.util.Scanner;
public class Java {
        public static void main (String[] args) {
            Scanner input = new Scanner (System.in);
            int n=5
            for(int i=1; i<=5; i++) {
                for (int j=1; j<=n-i; j++) {
                    System.out.print(" ");
                }
                for (int k=1; k<=i; k++)
                {
                    System.out.print("* ");
                }
            }
        }
}
```

OUTPUT :-

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

7. PASCAL TRIANGLE

```java
import java.util.Scanner;
public class Java {
    public static void main (String [] args){
        Scanner input = new Scanner (System.in);
        int n = input.nextInt ();
        for (int i = 1; i <= n; i++){
            int a = 1;
            for (int s = 1; s = n-i ; s++){
                System.out.print (" ");
            }
            for (int j = 1; j <= i; j++){
                System.out.print (a+ " ");
                a = a * (i-j)/j;
            }
            System.out.println ();
        }
    }
}
```

OUTPUT :-

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

8. SIMPLE INTEREST

```java
import java.util.Scanner;
public class Java{
        public static void main (Strings[]args){
            Scanner input = new Scanner (System.in);
            int pri = input.nextInt();
            int year = input.nextInt();
            char age = input.next().charAt(0);
            double interest = 0.0;
            if (age == 'y')
            {
                interest = (pri* year* 0.1)/100;
                System.out.print (interest);

            }
            else
            {
                interest = (pri* year * 0.1)/100;
                System.out.print (interest);
            }
        }
    }
}
```

OUTPUT :-
```
200000
3
2
600.0
```

9. Java Program to find Even sum of Fibonacci Series

```java
import java.util.Scanner;
public class Java{
        public static void main(String[] args){
            int n = input.nextInt();
            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.print("thisum"; +Sum);

    }

}
```

OUTPUT :-
4
33

10) PRINT m to n NUMBERS SKIPPING t numbers in between :-

```java
import java.util.Scanner;
public class Java {
        public static void main (String [] args){
            Scanner input = new Scanner (System.in);
            int m = input.nextInt();
            int n = input.nextInt();
            int k = input.nextInt();
            for (int i = m; i <= n; i = i+k+1){

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

            }

        }

}
```

OUTPUT:-

50
100
7
50 58 66 74 82 90 98