

CSA0993 - Programming in JAVA for
Application.

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DATE: 24/07/24

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 a program to check the entered user name is valid or not. Get both the inputs from the user.

```
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("User name is Invalid");  
}
```

```
}  
}  
}
```

3.

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.print("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.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 correctly.");
        } else {
            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.print("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

```

import java.util.Scanner;
public class GreeksForGeeks {
    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();
        }
    }
}
}

```



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

```
{
```

```
    int k=5;
```

```
    StarRightTriangle(k);
```

```
}
```

```
}
```

7. Write a program to print the below pattern?

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

```
class GFG{
```

```
    public static void print Pascal (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;
```

```
    print Pascal (n);
```

```
}
```

```
}
```


8.

Simple Integers:

```
Public class SI {
```

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

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

```
        int pri = 200000;
```

```
        int yr = 3;
```

```
        char arg = input.next().charAt(0);
```

```
        double interest = 0.0;
```

```
        if (arg == "y") {
```

```
            interest = (pri * yr * 0.12) / 100;
```

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

```
        }  
        else {
```

```
            interest = (pri * yr * 0.1) / 100;
```

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

```
        }
```

9.

Fibonacci Sum:

```
Public class Fibonacci sum {
```

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

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

```
        int a1 = 0, a2 = 1, a3;
```

```
        int a[] = new int[50];
```

```
        for (int i = 0; i < n; 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("sum = " + sum);
}
}

```

10. Number:

```

Public class number {
    Public (static void main (String [], args) {
        int m = 50, N = 100, K = 7;
        for (int i = m; i <= N; i = i + K + 1) {
            System.out.println(i + " ");
        }
    }
}
}
}

```