

REG NO: 192373011

NAME: EBIN ANTHONY P

COURSE : Programming in Java for Application Development. (CSA 0993)

Page _____

Date _____

1. Reverse a word using loop.

```
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);
```

Input: TEMPLE

Output: ELPMET

2. Program to Check entered user name valid or not.

```
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 Invalid");
```

Input: Saveetha @ 789

~~Output~~: Saveetha @ 123

Output: User name is Invalid

3.

Reverse a number using loop.

```
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);

Input : 14567

Output: 76541

4. Person eligible for voting or not:

```
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 ("you are allowed to after vote
                      after " + (18 - age));
```

Input: Enter your age:

7

Output: You are allowed to vote after 11 years.

5 LCM and GCD of n numbers.

```

import java.util.Scanner;
public class ak {
    static int gcd (int a, int b) {
        if (a==0)
            return b;
        return gcd (b%a, a); }
    static int findgcd (int a[], int n) {
        int res=a[0];
        for (int i=0; i<n; i++) {
            res=gcd (res, a[i]);
            if (res==1)
                return 1;
        }
        return res;
    }
    public static void main (String [] args) {
        Scanner input=new Scanner (System.in);
        int n=input.nextInt();
        int a[]={};
        for (int i=0; i<n; i++)
            a[i]=input.nextInt();
        System.out.println (findgcd (a, n));
        int gcd=findgcd (a, n);
    }
}

```

```
int mul=1;  
for (int i=0; i<n; i++)  
{  
    mul = mul * a[i];  
}  
int lcm = mul/gcd;  
System.out.println(lcm);  
}
```

Input

N value=2

Number 1= 16

Number 2= 20

Output :

LCM=80

GCD=4

6. Program to print Right Triangle Star Pattern

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

```
int n=5;
```

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

```
{
```

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

```
{
```

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

```
}
```

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

```
{
```

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

```
}
```

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

```
}
```

Input: n=5

Output

```
*
```

```
***
```

```
***
```

```
***
```

```
***
```

7.

Program to print below Pattern.

1
1 1
1 2 1
1 3 3 1
1 4 6 4 1

```
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();
}
```

8 Program Using function to calculate simple interest.

```

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 * 0.12) / 100;
    System.out.print(interest);
}
else
{
    interest = (pri * year * 0.0) / 100;
    System.out.print(interest);
}

```

Input :

Enter principal amount : 200000

Enter no. of years : 3

Is customer senior citizen (y/n) : n

Output

Interest : 60000

9. Find even sum of Fibonacci Series till number n

```
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+=2)
{
```

sum = sum + a[i];

}

System.out.println("\nSum: " + sum);

Input: n=4

Output = 33

0, 1, 1, 2, 3, 5, 8, 13, 21

Sum = 0+1+3+8+21 = 33

10. Print numbers from M to N by skipping K no between.

```
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 + " ");
}
```

Input:

M=50 N=100 K=7

Output:

50, 58, 66, 74, ...