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

```
Import java.util.scanner;
    Public class reverse string {
        Public static void main (string [] args){
            scanner input = new scanner (system.in):
            string name = input. Nextline();
            string reversed = " ";
            for int i = name. length()-1; i>=0; i--){
                reversed + = name char. At(i);}
            system.out. print (reversed);
            input. close();}

    }
```

Input: Temple
Output: elpmeT

2. Check entered user name is valid or not

```
Import java.util.scanner;
Public class validate username{
    Public static void main(string[] args){
        scanner input = new scanner(system in);
        system.out.print ("enter user name:");
        string s1 = input.nextline();
        system.outprint ("enter username:");
        string s: input.nextline();
        if (s.equal(s2)){
            system.out.print ("username is valid");}
        else{
```

```
                    system.out.print ("User name is   invalid");}
        input.close ();}
```

Output:

```
Jes@ool
SeJ@ool
→ user name is valid
```

3. Reverse a number:

```
Import java.util.scanner:
Public class reversenumber{
    Public static void main (string F, args){
        scanner input = new scanner (system,in);
        int n= input.next Int();
        int rev =0;
        while (n!=0){
            rev = rev+ (10+n%10;
            n/=10;}
        System.out.print (rev);
        Input.close ();}
    }
```

Input: 12345
Output: 54321

4. To find the person is eligible to vote or not.

```
Import java.util.scanner;
Public class votingeligiblity{
    Public static void main (string[]args){
        scanner input = newscanner(system,in);
        system.out.print ("enter your age"):
        int age= input.nextint();
        if (age <=0){
            system.out print ("enter Above correctly");
```

```java
        else if (age >18){
            system.out.print("an eligible to vote");}
        else{
            system.out.print("allowed to vote after "+ (18 -age)+"years");}
    input, close();}
}
```

Output:

Enter Your age: 21
→ eligible to vote

5. Find LCM and GCD of n numbers:

```java
Import java.util.Scanner;
Public class GCD_LCM{
    static int gcd (int a, int b){
        return a (b/gcd (a,b));}
    public static void main (string [] args){
        scanner input=new scanner (system.in);
        int n= input next int();
        int gcd= input.next int();
        int lcm=gcd;
        for (int i=1;i<n;i++){
            int num= input.next int[];
            gcd=gcd (gcd, num);
            lcm= lcm [lcm, num];}
        System.out.println ("GCD ="+gcd);
        System.out.println ("LCM=" +lcm);
        input.close();}
}
```

Output:

GCD =1
LCM=276

6. Print right triangle star pattern:

```java
Import java.util. Scanner;
    public class right triangle star pattern{
        Public static void main (string[]args){
            Scanner input= new scanner [system. in];
            int n=input.nextline1;
            for (int i=1; i<=n; i++){
                for (int j=1; j<=1; j++){
                    system.out .print (" * ");}
                System out. print (n); }
            input.close(); }
    }
```

Output : 5
```
*
* *
* * *
* * * *
* * * * *
```

7. Pascal triangle:

```java
Import java.util. scanner;
    public class pascal triangle{
        public static void main (string[] args){
            Scanner input= new scanner (system.in);
            int n= input.nextint();
            for (int i=0; i<n; i++){
                for (int S=0; S<n-i-1; S++){
                    System.out.print (" ");}
                int a=1;
                for (int j=0; j<=i; j++){
                    System.out.print (a " ");
```

```
              a = a * (i-j) | (j+1) ; }
           system.out.print ln (); }
       input.close(); }
    }
```

Output : 5

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

8. Write a program using function to calculate simple intrest.

```
Import java.util. scanner;
Public class.simple Interest calculator{
    public static double calculate interest (double)
    principal - int year, boolean is senior citizen {
        double rate = is senior citizen ?
        return principal + rate + year; }
Public static void main (string [] args){
    scanner input = new scanner (system.in);
    double principal = input. next Double();
    system.out.print ("enter no. of years:");
    system.out.print ("is customer senior citizen(Y/N):");
    boolean's senior citizen; iput next();
    equals ignore case ("y");
    double interest = calculateInteres
            (principal, years, is senior citizen);
```

```java
            system.out.principle ("interest: ",+ interest);
            input. close();}
    }
```

Output:

enter principal amount: 20000

enter no. of years: 3

is customer senior citizen (Y/N): N

Interest: 60000.0

9. even sum of Fibonacci:

```java
Import java.util.scanner;
Public class even fibonaccisum{
    Public static void Main(string [] args){
        scanner input = newscanner(system.in);
        int n = input.nextint();
        int a₁=0, a₂=1, sum=0;
        for (a₁=0, a₂=i <=n+2; i++){
            if (i%2==0) sum+=a1;
            int a₃ =a, +a₂;
            a₂=a₃;}
        system.out.println ("sum: "+sum);
        input.close();}
}
```

Output: 4

Sum = 33

10. Print members from n to 0 by skip k numbers in between.

```java
Import java.util.scanner;
    Public class skipnumbers {
        Public static void main (string []args){
            scanner input= new scanner (stem.in)
            int m = input.next int();
            int n = input.next int();
            int k = input.next int();
            for (int i=m; i<=n; i=k+1){
                system.out.print (i+" ");}
            input.close();}
    }
```

Input : 50
100
70

Output; 50,58,66,74,82,90,98