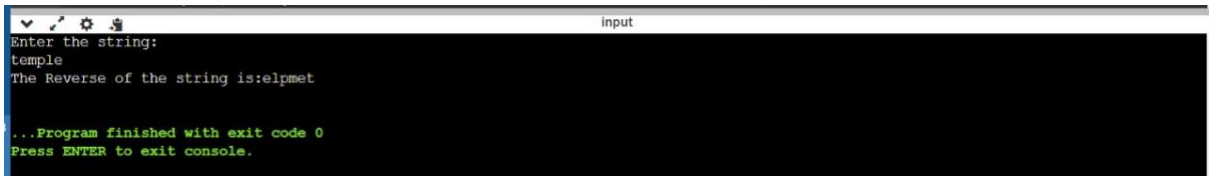
```
1. import java.util.*;
import java.io.*;
class Main
{
        public static void main(String[] args)
        {

           String a,b="";
           char c;
           int d=0,i;
           try
           {
              Scanner sc=new Scanner(System.in);
              System.out.println("Enter the string:");
              a=sc.next();
              d=a.length();

              for(i=d-1;i>=0;i--)
              {
                 b=b+a.charAt(i);

              }

              System.out.println("The Reverse of the string is:"+ b);

           }
           catch(Exception e)
           {
              System.out.println("Enter only string");
           }
```

```
        }
}
```




```
2. import java.util.*;
 class username{
   public static void main(String args[])
   {
      String s1,s2;
      boolean result;
      Scanner s= new Scanner(System.in);
      s1=s.nextLine();
      s2=s.nextLine();
      result=s1.equals(s2);
      if (result==false)
      {
         System.out.println("User name is Invalid");
      }
      else
      {
         System.out.println("User name is valid");
      }
   }
}
```

3. import java.io.*;

import java.util.*;

class reverse

{

public static void main(String arg[])

{

try

{

Scanner sc=new Scanner(System.in);

int n,re=0,rem;

System.out.println("Enter a number:");

n=sc.nextInt();

while(n!=0)

{

rem=n%10;

re=re*10+rem;

n=n/10;

}

System.out.println("The reversed number is:"+re);

}

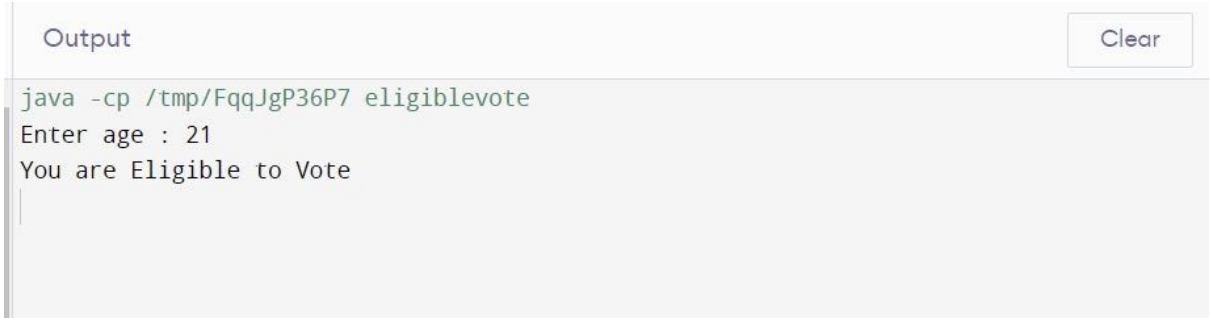
catch(Exception e)

{

```
            System.out.println("Enter a valid number");
        }
    }
}
```

4.
```
import java.util.*;
class eligiblevote {
  public static boolean checkInt(String s){
    try{
      int n = Integer.parseInt(s);
      return true;
    }
    catch(NumberFormatException e){
      System.out.println("Enter a Valid Age in Integer.");
      return false;
    }
  }
  public static void main(String[] Args){
    Scanner sc = new Scanner(System.in);
    String age;
    System.out.println("Enter age : ");
    age = sc.nextLine();
    if(checkInt(age) == true ){
      int a = Integer.parseInt(age);
```

```
        if(a > 0){
            if(a >= 18){
                System.out.println("You are Eligible to Vote");
            }
            else{
                int d = 18 - a;
                System.out.println("Sorry ! You are Eligible after " + d + " years.\n");
            }
        }
        else{
            System.out.println("Enter a Valid Age.");
        }
    }
  }
}
```



5.
```
import java.util.Scanner;
import java.io.*;
 class GCD
{
   static int gcd(int x, int y)
   {
      int r=0, a, b;
      a = (x > y) ? x : y; // a is greater number
      b = (x < y) ? x : y;
      r = b;
```

```
    while(a % b != 0)
    {
        r = a % b;
        a = b;
        b = r;
    }
    return r;
}

static int lcm(int x, int y)
{
    int a;
    a = (x > y) ? x : y; // a is greater number
    while(true)
    {
        if(a % x == 0 && a % y == 0)
            return a;
        ++a;
    }
}
public static void main(String args[])
{
    try
    {
    Scanner sc = new Scanner(System.in);
    System.out.println("Enter N value: ");
    int N=sc.nextInt();
    if(N==2)
    {
    System.out.println("Enter the two numbers: ");
    int x = sc.nextInt();
```

```
int y = sc.nextInt();

System.out.println("The GCD of two numbers is: " + gcd(x, y));
System.out.println("The LCM of two numbers is: " + lcm(x, y));
}
if(N==3)
{
System.out.println("Enter the three numbers: ");
int x = sc.nextInt();
int y = sc.nextInt();
int z = sc.nextInt();
int i;
int a=Math.max(x,Math.max(y,z));
while(true)
{
  if(a % x == 0 && a % y == 0 && a%z==0)
  {
        break;
   }
  else
  ++a;
}
System.out.println("LCM of "+x+", "+y+" and "+z+" is "+a);
int b=Math.min(x,Math.min(y,z));
for(i=b;i>=0;i--)
{
    if((x%i==0) && (y%i==0) && (z%i==0))
                    break;
  }
System.out.println("GCD of "+x+", "+y+" and "+z+" is "+i);
}
```

```
    }
     catch(Exception e)
      {
        System.out.println("Enter only numbers");
      }
    }
}
```

6.
```
import java.util.Scanner;
 class RightTriangleStarPattern {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        System.out.print("Enter the number of rows for the right triangle: ");
        int numRows = scanner.nextInt();
        for (int i = 1; i <= numRows; i++) {
            for (int j = 1; j <= numRows - i; j++) {
                System.out.print(" ");
            }
            for (int k = 1; k <= i; k++) {
                System.out.print("*");
            }
            System.out.println();
        }
        scanner.close();
```

```
    }
}
```

7.
```
import java.util.Scanner;

public class PascalTriangle {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in
        System.out.print("Enter the number of rows for the Pascal's Triangle: ");
        int numRows = scanner.nextInt();
        for (int i = 0; i < numRows; i++) {
            // Print spaces for the left side of the triangle
            for (int j = 0; j < numRows - i; j++) {
                System.out.print("\t");
            }
            int value = 1;
            for (int k = 0; k <= i; k++) {
                System.out.print("\t" + value);
                value = value * (i - k) / (k + 1);
            }
            System.out.println();
        }
        scanner.close();
    }
}
```

```
Enter the number of rows for the Pascal's Triangle:                                    1
                                        1       1
                                1       2       1
                        1       3       3       1
                1       4       6       4       1
```

8. import java.util.*;

class interest

{

public static void main(String[] args)

{

try

{

double p;

int n;

double r,i;

Scanner sc=new Scanner(System.in);

System.out.print("Is the person is senior citizen(y/n): ");

char g=sc.next().charAt(0);

System.out.println("Enter the principal amount:");

p=sc.nextDouble();

System.out.println("Enter the no.of.years:");

n=sc.nextInt();

if(g=='y'||g=='Y')

{

r=12;

i=p*n*r/100;

System.out.println("Interest:"+i);

}

if(g=='n'||g=='N')

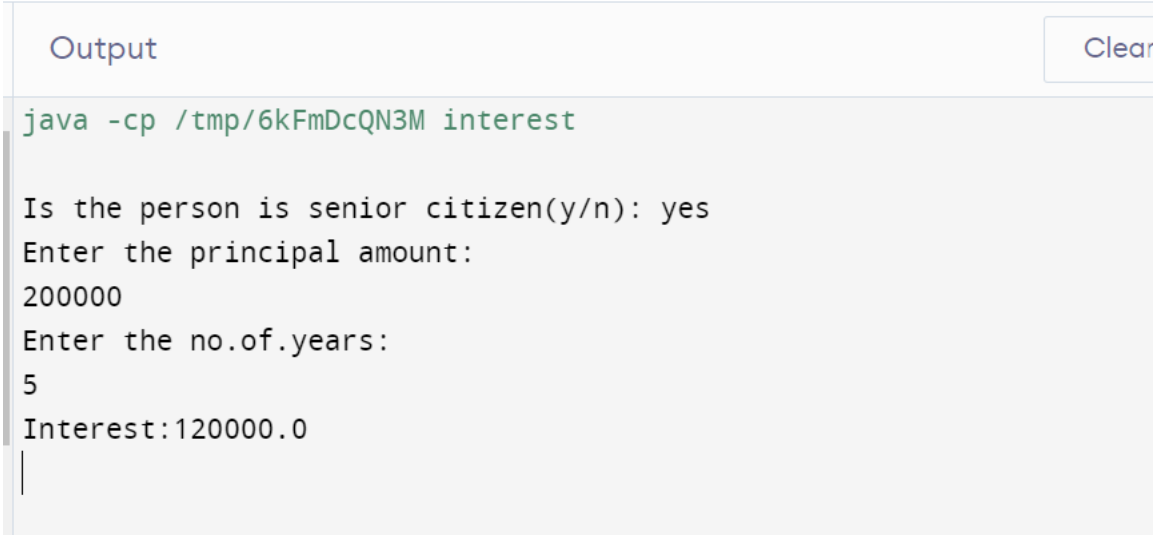
{

r=10;

i=p*n*r/100;

System.out.println("Interest:"+i);

```
        }
        if(p<=0)
        {

           System.out.println("Enter the valid amount");
        }
        if(n<=0)
        {
           System.out.println("Enter the valid no.of.years");
        }
      }
      catch(Exception e)
      {
         System.out.println("Enter the amount");
      }
   }
}
```




```
9. import java.util.Scanner;
      import java.io.*;
 class DAY2EVENSUMOFFIBONACCISERIES {
   public static void main(String[] args){
      int my_input, i, sum;
```

```
      System.out.println("Required packages have been imported");
      Scanner my_scanner = new Scanner(System.in);
      System.out.println("A reader object has been defined ");
      System.out.println("Enter the value of N: ");
      my_input = my_scanner.nextInt();
      int fabonacci[] = new int[2 * my_input + 1];
      fabonacci[0] = 0;
      fabonacci[1] = 1;
      sum = 0;
      for (i = 2; i <= 2 * my_input; i++) {
         fabonacci[i] = fabonacci[i - 1] + fabonacci[i - 2];
         if (i % 2 == 0)
            sum += fabonacci[i];
      }
      System.out.printf("Even sum of fibonacci series till number %d is %d" , my_input, sum);
   }
}
```

Output Clear

```
java -cp /tmp/6kFmDcQN3M DAY2EVENSUMOFFIBONACCISERIES
Required packages have been imported
A reader object has been defined
Enter the value of N:
4
Even sum of fibonacci series till number 4 is 33
```

10.

```
import java.util.*;
 class DAY2SKIPPING
{
   public static void main(String[] args) {
      try
      {
```

```
        Scanner obj=new Scanner(System.in);
        System.out.println("M=");
        int m=obj.nextInt();
        System.out.println("N=");
        int n=obj.nextInt();
        System.out.println("K=");
        int k=obj.nextInt();
        if(m<=0 || n<=0 || k<=0)
        {
          System.out.println("invalid input");
        }
        else if(m<=n || k>=n || n<=m)
        {
          System.out.println("invalid input");
        }
        while(m<=n)
        {
          System.out.println(m);
          m=m+k+1;
        }
      }
      catch (Exception e){
        System.out.println("invalid input");
      }
    }
}
```

Output Clear

```
java -cp /tmp/6kFmDcQN3M DAY2SKIPPING

M=
50
N=
100
K=7
invalid input
50
58
66
7482
90
98
```