```
1 ] //Write a program to print out all Armstrong numbers between 1
and 500.
package Demo;
public class ArmstrongNumber {

    public static void main(String[] args) {
     int n; int b ;int count =0;
      System.out.println("Armstrong numbers are >>");
           for(int i=1;i<=500;i++)
           {
               n=i;
               while(n>0)
               {
                   b=n%10;
                   count = count + (b*b*b);
                   n=n/10;
               }
               if(count == i)
               {
                   System.out.print(+i +" ");
               }
               count =0;

           }
       }

}
```

```
<terminated> ArmstrongNumber [Java Application] C:\Program
Armstrong numbers are >>
1 153 370 371 407
```

o/p =

```
2] package Demo;
// Write a Java program to print numbers between 1 to 100 which are
divisible by 3, 5 and by both.

public class Divisible3and5 {

    public static void main(String[] args) {
           int count =0;
           for(int i=1;i<=100;i++)
           {
               count =0;
               if (i%3==0 || i%5==0)
               {
```
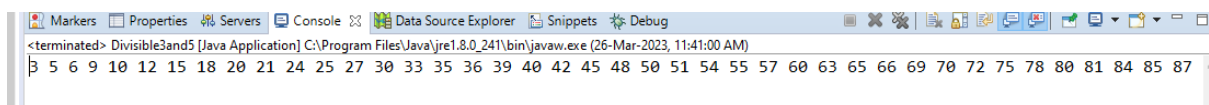
```java
                count++;

            }
            if(count!=0)
            {
                System.out.print(+i+" ");
            }
        }

    }

}
```

o/p =

3)
```java
package Demo;

import java.util.Scanner;

//Write a program to print Fibonacci series of n terms where n is
input by user :
//0 1 1 2 3 5 8 13 24 .....
public class Fibonacci {

    public static void main(String[] args) {
        int num1 = 0;
        int num2 = 1;
        int next;
        int input;
        System.out.println("Enter the number for  fibonacci >>");
        Scanner sc = new Scanner(System.in);
        input = sc.nextInt();
        for (int i = 1; i <= input; i++) {
            System.out.print(num1 + " ");
            next = num1 + num2;
            num1 = num2;
            num2 = next;
        }
        // System.out.println("Addition of Series is >>"+num2);
    }

}
```
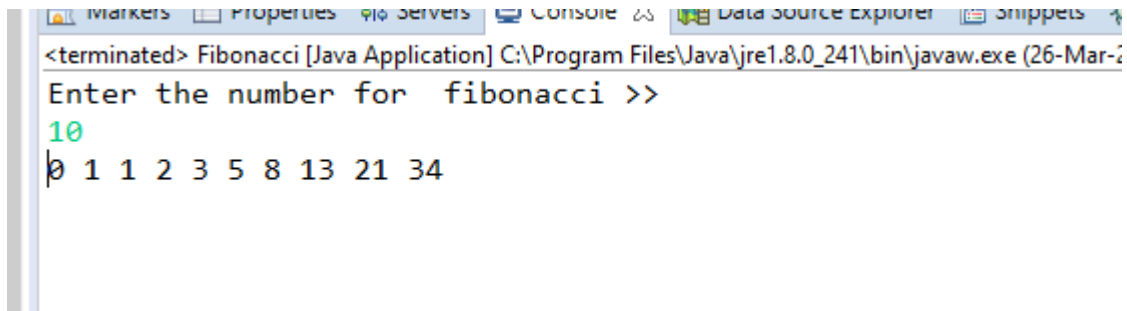o/p=

```
Enter the number for  fibonacci >>
10
0 1 1 2 3 5 8 13 21 34
```

4)
```java
package Demo;

import java.util.Scanner;

public class LargestThree {

    public static void main(String[] args) {

        int num1 , num2 ,num3;
        System.out.println("Enter three numbers >>>");
        Scanner sc = new Scanner(System.in);
        num1= sc.nextInt(); num2=sc.nextInt(); num3=sc.nextInt();
        if(num1>num2 && num1>num3)
        {
            System.out.println("Gretest number is >> "+num1);
        }else if(num2>num1 && num2>num3)
        {
            System.out.println("Gretest number is >> "+num2);
        }else {
            System.out.println("Gretest number is >> "+num3);
        }

    }

}
```
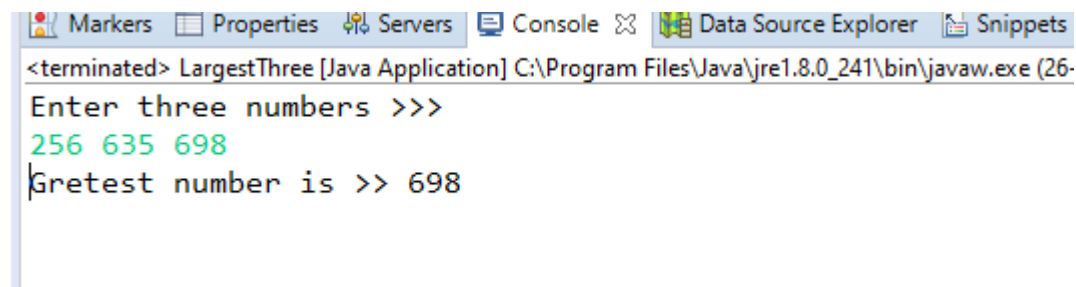
o/p =

```
Enter three numbers >>>
256 635 698
Gretest number is >> 698
```

5)
```java
package Demo;
```
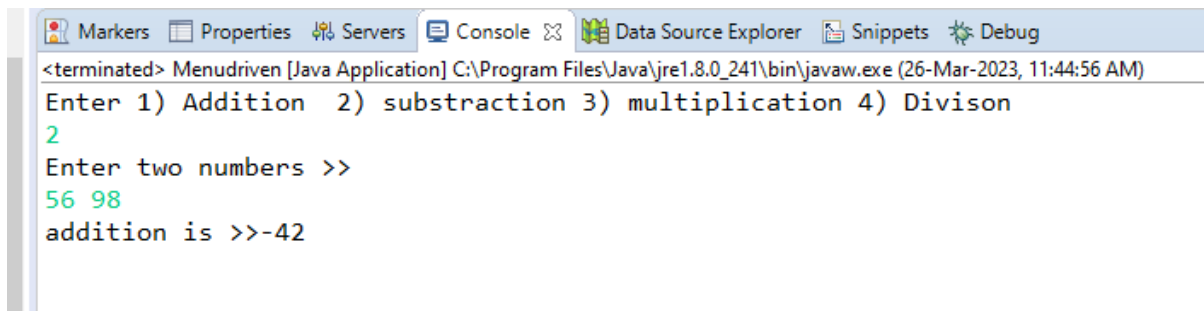
```java
import java.util.Scanner;

public class Menudriven {

    public static void main(String[] args) {
        int addition;
        int substraction;
        int multiplication;
        int division;
        int a,b; int input;
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter 1) Addition  2) substraction 3)
multiplication 4) Divison ");
        input = sc.nextInt();
        System.out.println("Enter two numbers >> ");
        a=sc.nextInt();
        b=sc.nextInt();
        switch(input)
        {
        case 1:
            addition =a+b;
            System.out.println("addition is >>"+addition);
            break;
        case 2:
            substraction =a-b;
            System.out.println("addition is >>"+substraction);
            break;
        case 3:
            multiplication =a*b;
            System.out.println("addition is >>"+multiplication);
            break;
        case 4:
            division =a/b;
            System.out.println("addition is >>"+division);
            break;
            default:
            {
                System.out.println("////////YOU ENTERED WRONG
CHOICE///////");

                break;

            }
        }


    }

}
```

o/p =

```
Enter 1) Addition  2) substraction 3) multiplication 4) Divison
2
Enter two numbers >>
56 98
addition is >>-42
```

6) ```java
package Demo;
// Write a program to calculate the sum of first 10 natural number.
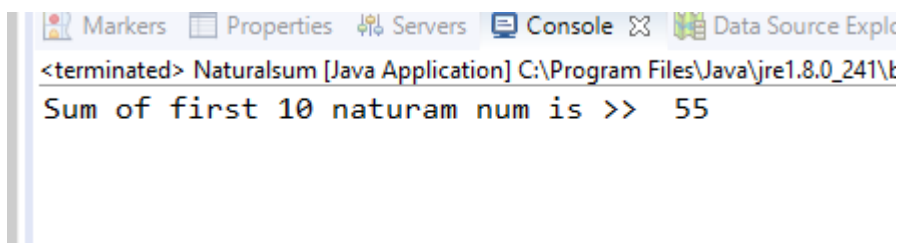public class Naturalsum {

    public static void main(String[] args) {
        // TODO Auto-generated method stub

        int num; int sum=0;
        for(num=1;num<=10;num++)
        {
            sum=sum+num;
        }
        System.out.println("Sum of first 10 naturam num is >> "+sum);
    }

}
```

o/p =

```
Sum of first 10 naturam num is >>  55
```

7) ```java
package Demo;

import java.util.Scanner;

/*Write a do-while loop that asks the user to enter two numbers.
 * The numbers should be added and the sum displayed. The loop
should ask the user whether he or
 * she wishes to perform the operation again. If so, the loop should
repeat; otherwise it should terminate.(while loop)
*/
public class PerformAddition {

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

```java
            for (;;) {

                int input;
                System.out.println("If you want to do addition then
enter 1 if not then 0 ");
                Scanner sc = new Scanner(System.in);
                input = sc.nextInt();
                if (input == 1) {
                    int num1, num2;
                    System.out.println("Please Enter a Number 1 >>
");
                    num1 = sc.nextInt();
                    System.out.println("Please Enter a Number 2 >>
");
                    num2 = sc.nextInt();
                    int num3 = num1 + num2;
                    System.out.println("Addition of numbers is>>"
+ num3);
                } else {
                    break;
                }
            }
        }

    }
```
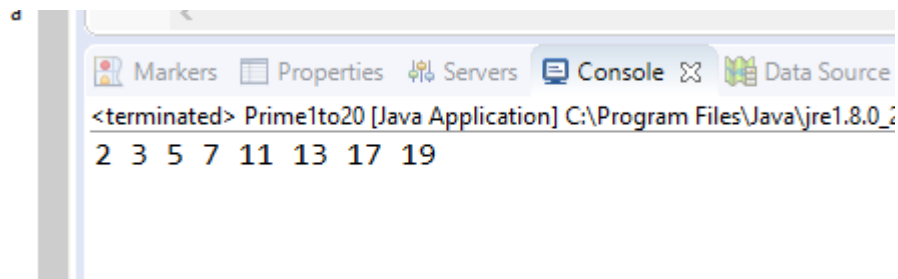o/p =

Markers   Properties   Servers   Console   Data Source Explorer   Snippets

```
<terminated> PerformAddition [Java Application] C:\Program Files\Java\jre1.8.0_241\bin\javaw.exe (
If you want to do addition then enter 1 if not then 0
1
Please Enter a Number 1 >>
45
Please Enter a Number 2 >>
21
Addition of numbers is>>66
If you want to do addition then enter 1 if not then 0
1
Please Enter a Number 1 >>
54
Please Enter a Number 2 >>
89
Addition of numbers is>>143
If you want to do addition then enter 1 if not then 0
0
|
```

```java
8) package Demo;

public class Prime1to20 {

    public static void main(String[] args) {
        int i,j;
        int count=0;
        for(i=2;i<=20;i++)
        {
            count = 0;
            for(j=2;j<i;j++)
            {
                if(i%j==0)
                {
                    count++;
                    break;
                }
            }
            if(count==0)
            {
                System.out.print(i+" ");
            }
        }

    }
}
```
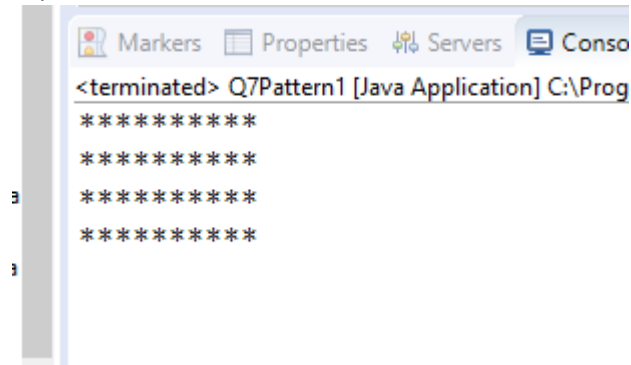
o/p =

Markers Properties Servers Console Data Source

`<terminated>` Prime1to20 [Java Application] C:\Program Files\Java\jre1.8.0_2

2 3 5 7 11 13 17 19

```java
9) package Demo;
/**********
 **********
 **********
 **********/
public class Q7Pattern1 {

    public static void main(String[] args) {
        for(int i=1;i<=4;i++)
        {
            for(int j=1;j<=10;j++)
            {
```

```java
                System.out.print("*");
            }
            System.out.println();
        }

    }

}
```
o/p =

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

10)
```java
package Demo;
/* *
   **
   ***
   ****
   *****   */
public class Q7Pattern2 {

    public static void main(String[] args) {

        for(int i =1;i<=5;i++)
        {
            for(int j=1;j<=i;j++)
            {
                System.out.print("*");
            }
            System.out.println();
        }

    }

}
```
o/p=

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

11) **package** Demo;

```
/*        *
      *    *
    *    *    *
  *    *    *      *      */
public class Q7Pattern3 {

    public static void main(String[] args) {
        for(int i =0;i<=4;i++)
        {
            for(int j=4-i;j>0;j--)
            {
                System.out.print(" ");
            }
            for(int k=0;k<=i;k++)
            {
                System.out.print("* ");
            }
            System.out.println();
        }


}
}
```

o/p =

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

12) **package** Demo;

```
/*      *
     ***
    *****
   *******
  ********* */

public class Q7Pattern4 {

    public static void main(String[] args) {
        for (int i = 1; i <= 5; i++) {
            for (int j = 5 - i; j >= 1; j--) {
                System.out.print(" ");
            }
            for (int j = 1; j <= 2 * i - 1; j++) {
                System.out.print("*");
            }
            System.out.println();
        }

    }

}
```
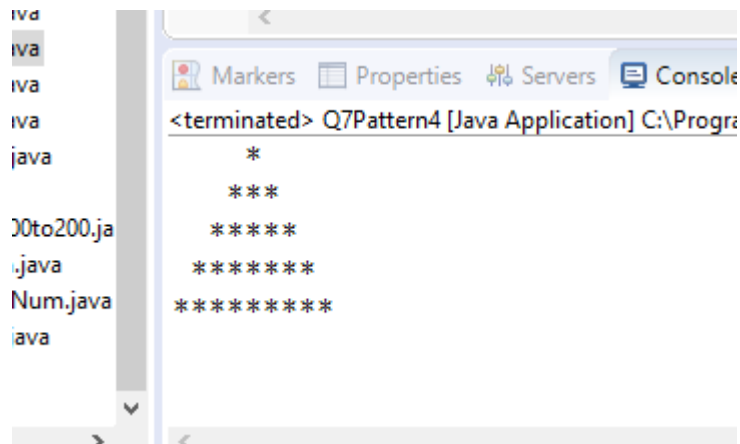o/p =


```
13) package Demo;
/*    1
     222
    33333
   4444444
  555555555 */
public class Q7Pattern5 {

    public static void main(String[] args) {

        for (int i = 1; i <= 5; i++) {
            for (int j = 5 - i; j >= 1; j--) {
                System.out.print(" ");
```
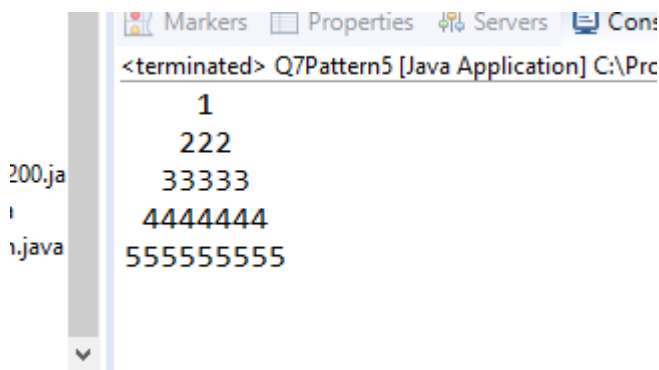
```
            }
            for (int j = 1; j <= 2 * i - 1; j++) {
                System.out.print(i);
            }
            System.out.println();
        }

    }

}
```
o/p =

```
        1
       222
      33333
     4444444
    555555555
```

14)

```java
package Demo;

import java.util.Scanner;

// Write a program that prompts the user to input an integer and
then outputs the number with the digits reversed.
//For example, if the input is 12345, the output should be 54321.
public class Reversenum {

    public static void main(String[] args) {
        int num;
        System.out.println("Please Enter a Number >> ");
        Scanner sc = new Scanner(System.in);
        num = sc.nextInt();
        int RevNum=0; int remainder =0;
         while (num != 0) {
                remainder = num % 10;
                RevNum = RevNum * 10 + remainder;
                num /= 10;
            }
        System.out.println("Reverse Num is >> "+RevNum);
    }

}
```
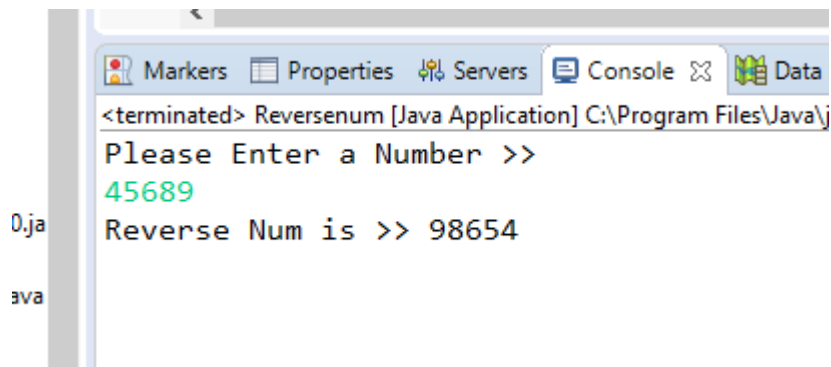o/p=

15) **package** Demo;
//Write a program to display first 1 to 20 even number on screen .
//Terminate the program when number 16 is found using break command
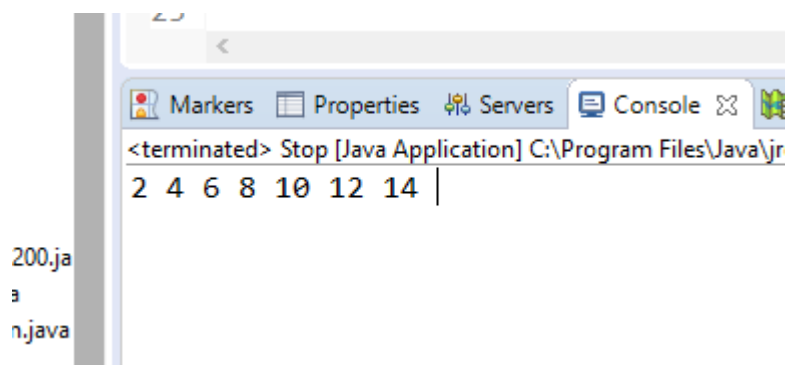.

public class Stop {

    public static void main(String[] args) {

        for(**int** i=1;i<=20;i++)
        {
            if(i%2==0)
            {
                if(i==16)
                {
                    break;
                }
                System.*out*.print(i+" ");
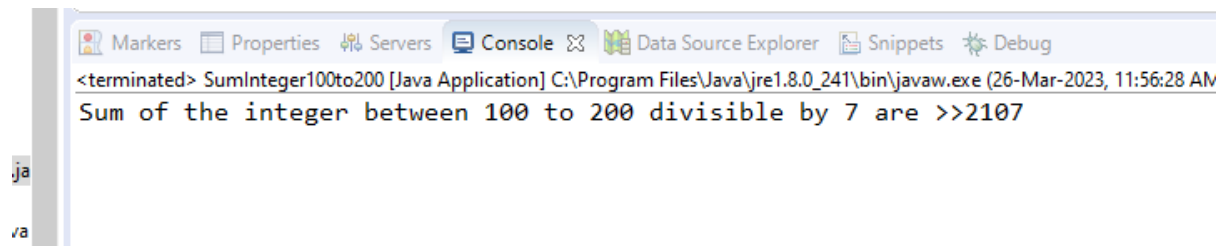   }
        }

    }

}
o/p =

16) **package** Demo;

```java
// Write a program to find sum of all integers greater than 100 and
less than 200 that are divisible by 7
public class SumInteger100to200 {

    public static void main(String[] args) {
        int sum = 0;
        for(int i=100 ;i<=200 ;i++)
        {
            if(i%7==0)
            {
                sum=sum+i;
            }

        }
        System.out.println("Sum of the integer between 100 to 200
divisible by 7 are >>"+sum);
    }

}
```
o/p =


```
Markers  Properties  Servers  Console ⊠  Data Source Explorer  Snippets  Debug
<terminated> SumInteger100to200 [Java Application] C:\Program Files\Java\jre1.8.0_241\bin\javaw.exe (26-Mar-2023, 11:56:28 AM
Sum of the integer between 100 to 200 divisible by 7 are >>2107
```

17)
```java
package Demo;

import java.util.Scanner;

// Write a program in java to find the sum of the even and odd
digits of the number which is given as input.
public class Sumoddeven {
//Solved With using Integer Array
    public static void main(String[] args) {
        int n, sumeven = 0, sumodd = 0;
        Scanner s = new Scanner(System.in);
        System.out.print("Enter the number of elements in array:");
        n = s.nextInt();
        int[] a = new int[n];
        System.out.println("Enter the elements of the array:");
        for(int i = 0; i < n; i++)
        {
            a[i] = s.nextInt();
        }
        for(int i = 0; i < n; i++)
        {
```
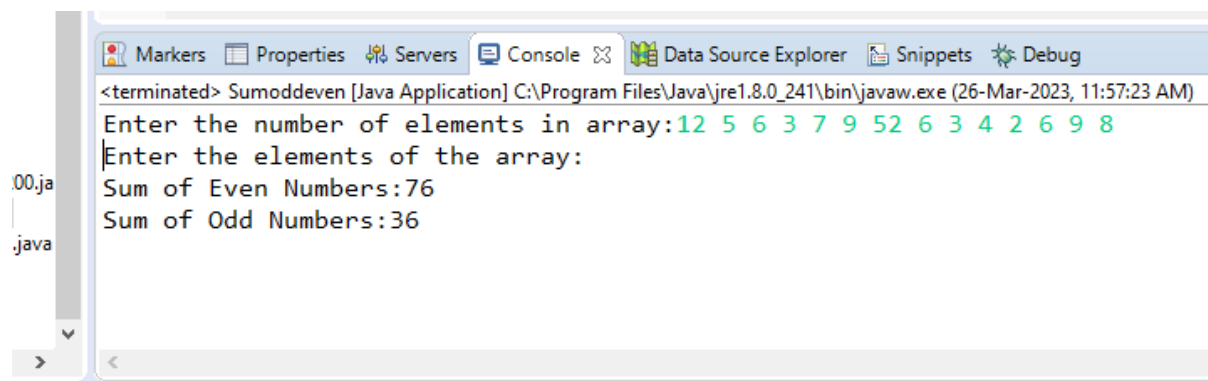
```java
            if(a[i] % 2 == 0)
            {
                sumeven = sumeven + a[i];
            }
            else
            {
                sumodd = sumodd + a[i];
            }
        }
        System.out.println("Sum of Even Numbers:"+sumeven);
        System.out.println("Sum of Odd Numbers:"+sumodd);
    }

}
```

o/p =


```
Markers   Properties   Servers   Console ⊠   Data Source Explorer   Snippets   Debug
<terminated> Sumoddeven [Java Application] C:\Program Files\Java\jre1.8.0_241\bin\javaw.exe (26-Mar-2023, 11:57:23 AM)
Enter the number of elements in array:12 5 6 3 7 9 52 6 3 4 2 6 9 8
Enter the elements of the array:
Sum of Even Numbers:76
Sum of Odd Numbers:36
```

18)
```java
package Demo;

import java.util.Scanner;

// Write a program that prompts the user to input a positive
integer.
//It should then print the multiplication table of that number.
public class TablePositiveNum {

    public static void main(String[] args) {
        int num;
        System.out.println("Please Enter a Number >> ");
        Scanner sc = new Scanner(System.in);
        num = sc.nextInt();

        if (num<=0)
        {
            System.out.println("num is negative");
        }else
        {
            for(int i=1;i<=10;i++)
            {
                System.out.println(num*i);
```
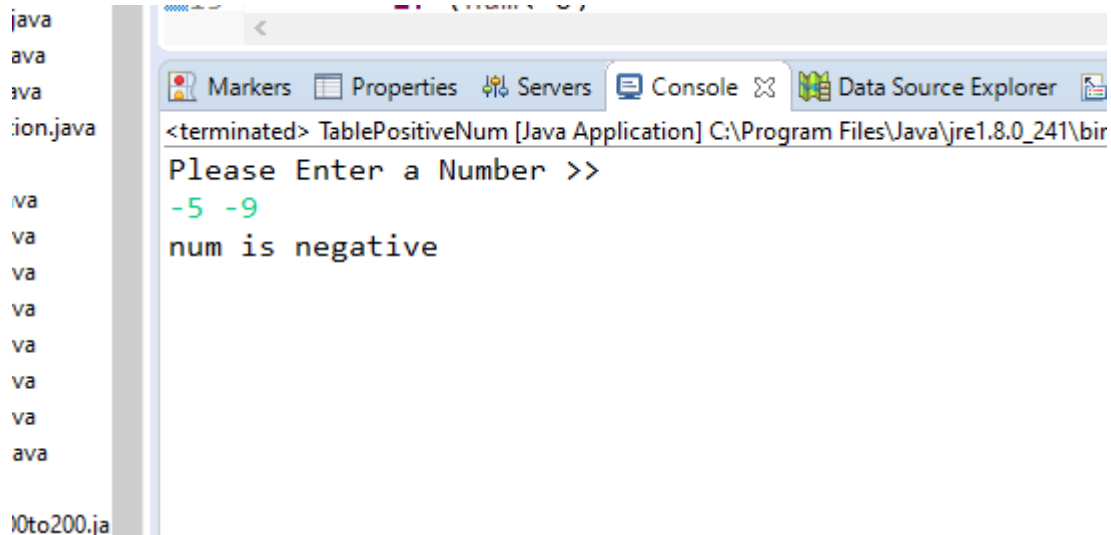
```
                    }
              }

       }

}
```
o/p =

Markers   Properties   Servers   Console ☒   Data Source Explorer

\<terminated\> TablePositiveNum [Java Application] C:\Program Files\Java\jre1.8.0_241\bir

Please Enter a Number >>
-5 -9
num is negative

19) package Demo;

//Write a Java program that accepts two double variables and test if both strictly between 0 and 1 and false otherwise.

//Hint n1 > 0 && n1 < 1 && n2 > 0 && n2 < 1

import java.util.Scanner;

public class TestNumber {

        public static void main(String[] args) {

                Scanner sc = new Scanner(System.in);

                 System.out.print("Input first number: ");

        double n1 = sc.nextDouble();
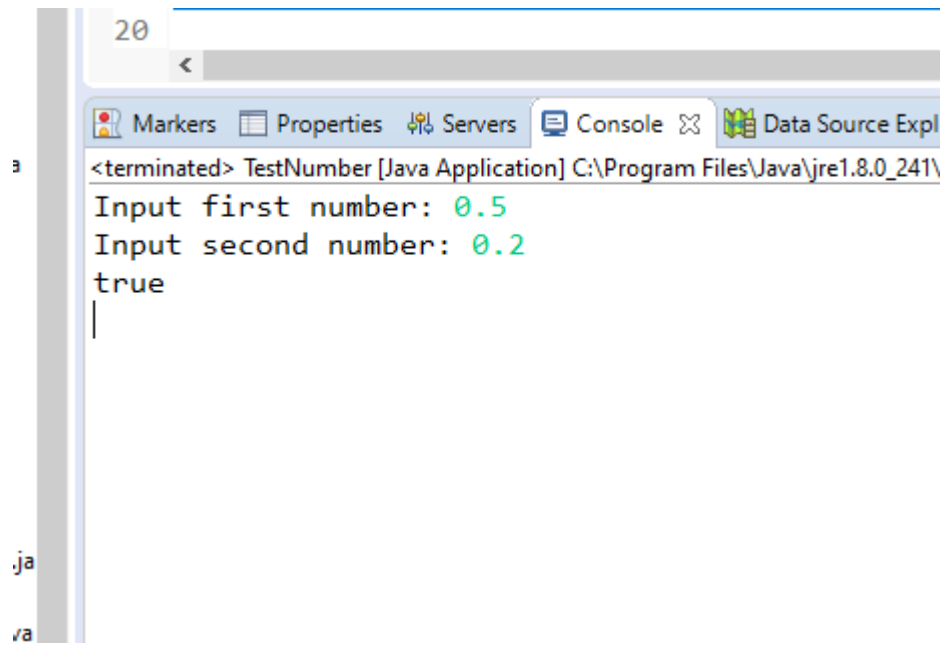
        System.out.print("Input second number: ");

        double n2 = sc.nextDouble();

                System.out.println(n1 > 0 && n1 < 1 && n2 > 0 && n2 < 1);
```

}


        }

o/p =