

# 1) Java Program to print an Integer Entered by the user

## Algorithm:

Step 1 : Start

Step 2 : Import java.util.Scanner

Step 3 : Take Input from the user / create reader instance

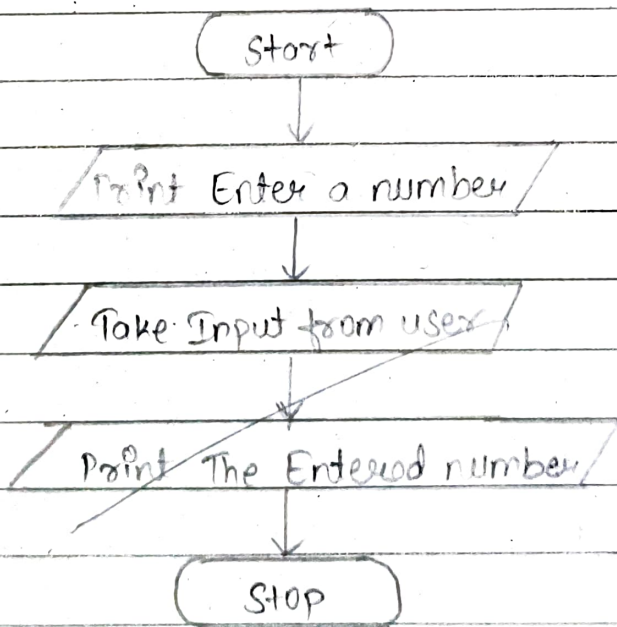
Step 4 : Print Enter a number

Step 5 : Read the number entered by user

Step 6 : Print the entered number

Step 7 : Stop

## Flowchart:



Code:

```
import java.util.Scanner;
public class HelloHloald
{
    public static void main (String [] args)
    {
        Scanner sc = new Scanner (System.in);
        System.out.println ("Enter a number: ");
        int number = sc.nextInt();
        System.out.print ("You entered: " + number);
    }
}
```

Output:

Akshora Singa

BM22CS029

Enter a number 29

You entered: 29

```
C:\Users\bmsce\Desktop\1bm22cs029>javac HelloWorld.java
```

```
C:\Users\bmsce\Desktop\1bm22cs029>java HelloWorld
```

```
Akshara Singa
```

```
IBM22CS029
```

```
Enter a number29
```

```
You entered: 29
```

2) Java program to check whether a number is even or odd

### Algorithm

Step 1: Start

Step 2: Print enter a number

Step 3: Take input from user and store in variable num

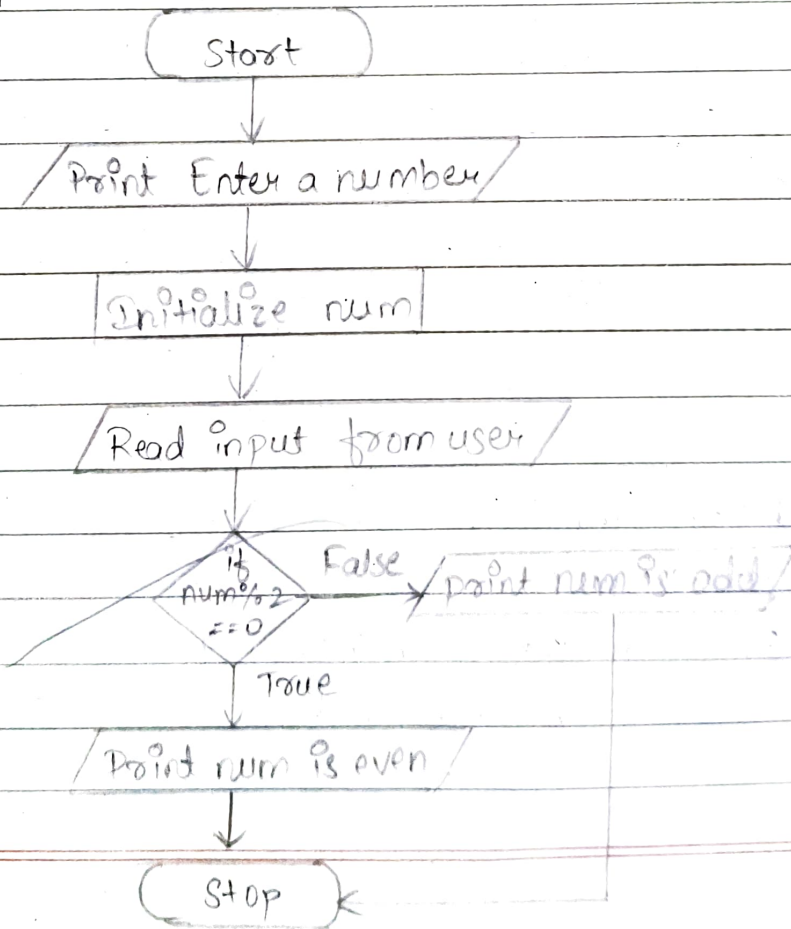
Step 4: Check if  $\text{num} \% 2$  gives remainder 0

Step 5: If true print number is even and goto step 7 else goto step 6

Step 6: Print number is odd

Step 7: Stop

### Flowchart



Code

```
import java.util.Scanner;
public class JavaExample
{
    public static void main (String[] args)
    {
        int num;
        System.out.print("Enter an Integer number:");
        Scanner sc = new Scanner (System.in);
        num = sc.nextInt();
        if (num%2==0)
            System.out.println (num+" is an even no.");
        else
            System.out.print (num+" is an odd number");
    }
}
```

Output:

Aksh Akshora Singa

18M22CS029

Enter an Integer number: 29

29 is an odd number

```
C:\Users\bmsce\Desktop\1bm22cs029>javac JavaExample.java
```

```
C:\Users\bmsce\Desktop\1bm22cs029>java JavaExample
```

```
Akshara Singa
```

```
1BM22CS029
```

```
Enter an Integer number:29
```

```
29 is an odd number.
```



3) Java program to print right triangled star pattern with eight rows

### Algorithm

Step 1: Start

Step 2: Initialize row, column and number of rows = 8

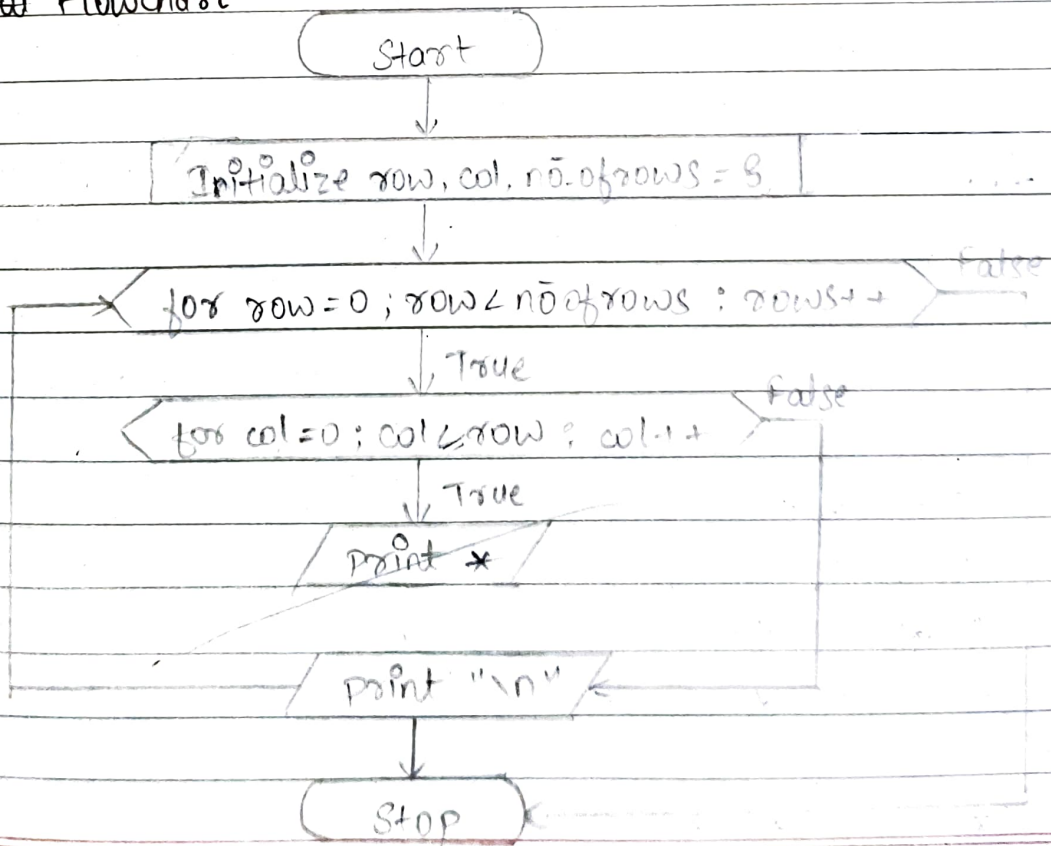
Step 3: for row less than number of rows increase row by one else goto step 6

Step 4: for column less than number of rows increase column by one else goto step 3 and print new line

Step 5: Print \*

Step 6: Stop

### Flowchart



code:

```
public class RightTriangle
{
```

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

```
        int row, column, numberOf rows = 8;
```

```
        for (row = 0; row < numberOf rows; row++)
        {
```

```
            for (column = 0; column < row row; column++)
            {
```

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

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

```
    }
```

```
}
```

Output

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



```
C:\Users\bmsce\Desktop\1bm22cs029>javac RightTriangle.java
```

```
C:\Users\bmsce\Desktop\1bm22cs029>java RightTriangle
```

Akshara Singa

1BM22CS029

\*

\* \*

\* \* \*

\* \* \* \*

\* \* \* \* \*

\* \* \* \* \* \*

\* \* \* \* \* \* \*

\* \* \* \* \* \* \* \*

4) Java program to find quotient and remainder of 15 and 2

### Algorithm

Step 1: Start

Step 2: Initialize  $\text{num1} = 15$  and  $\text{num2} = 2$

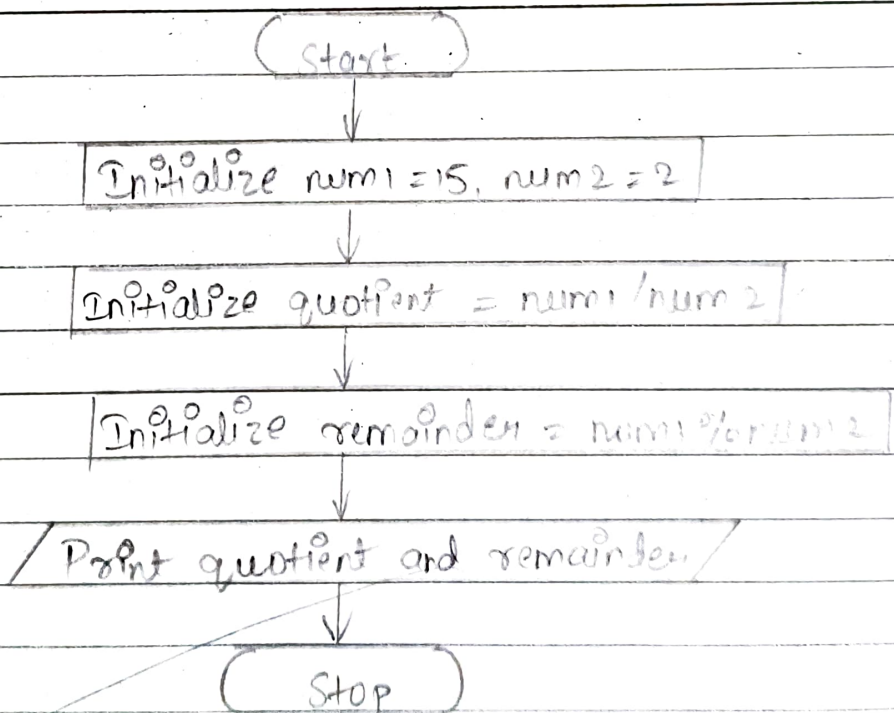
Step 3: Set  $\text{quotient} = \text{num1} / \text{num2}$

Step 4: Set  $\text{remainder} = \text{num1} \% \text{num2}$

Step 5: Print quotient and remainder

Step 6: Stop

### Flowchart



Code

```
public class QuotientAndRemainder
{
    public static void main (String[] args)
    {
        int num1 = 15, num2 = 2;
        int quotient = num1 / num2;
        int remainder = num1 % num2;
        System.out.println ("Quotient is: " + quotient);
        System.out.println ("Remainder is: " + remainder);
    }
}
```

Output

Quotient is : 7

Remainder is : 1

```
C:\Users\bmsce\Desktop\1bm22cs029>javac QuotientAndRemainder.java
```

```
C:\Users\bmsce\Desktop\1bm22cs029>java QuotientAndRemainder
```

```
Quotient is: 7
```

```
Remainder is: 1
```

```
Akshara Singa
```

```
1BM222CS029
```

## 5) Java Program to multiply two numbers

### Algorithm

Step 1: Start

Step 2: Print Enter first number

Step 3: Set entered number to num 1

Step 4: Print Entered second number

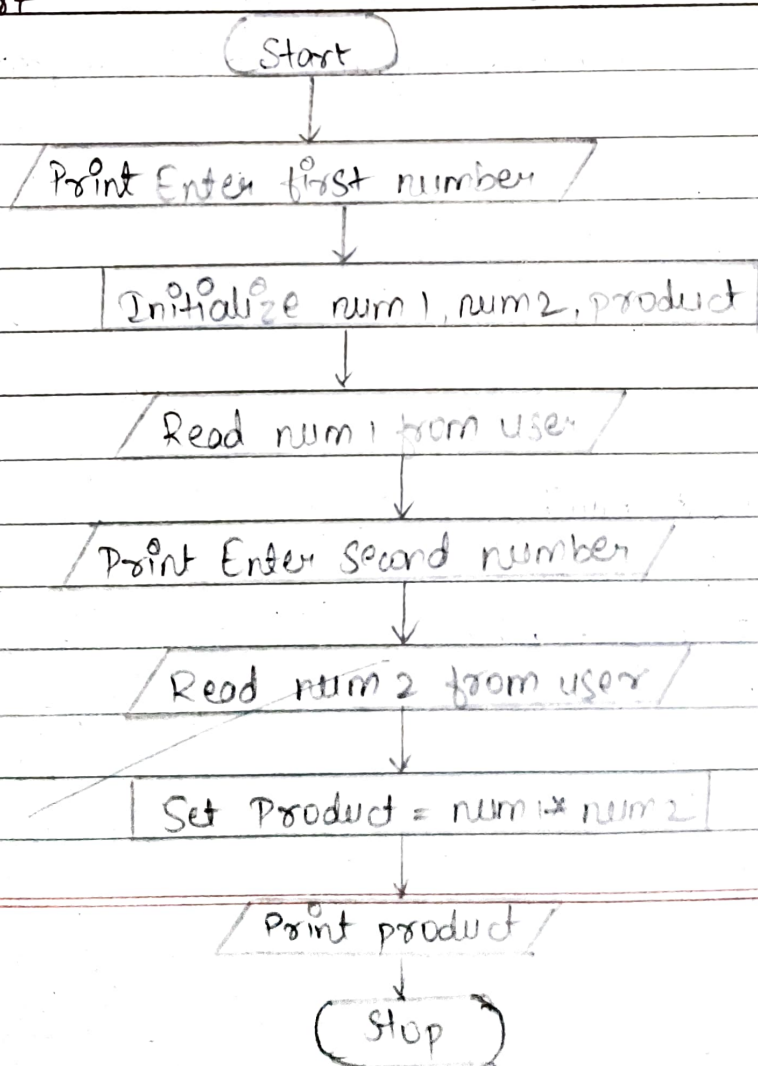
Step 5: Set entered number to num 2

Step 6: Calculate <sup>and set</sup> product = num 1 \* num 2

Step 7: Print product

Step 8: Stop

### Flowchart



Code

```
import java.util.Scanner;  
public class Multiplication  
{  
    public static void main (String[] args)  
    {  
        Scanner sc = new Scanner (System.in);  
        System.out.println("Enter first number:");  
        int num1 = sc.nextInt();  
        System.out.println("Enter second number:");  
        int num2 = sc.nextInt();  
        sc.close();  
        int product = num1 * num2;  
        System.out.println("Output: " + product);  
    }  
}
```

output

Enter first number:

2

Enter second number:

3

Output : 6



```
C:\Users\bmsce\Desktop\1bm22cs029>javac Multiplication.java
```

```
C:\Users\bmsce\Desktop\1bm22cs029>java Multiplication
```

```
Enter first number:
```

```
2
```

```
Enter second number:
```

```
3
```

```
Output: 6
```

```
Akshara Singa
```

```
1BM22CS029
```

6) Swap the floating point numbers 1.2 and 2.45 using a temporary variable

### Algorithm

Step 1: Start

Step 2: Initialize  $\text{num1} = 1.2$ ,  $\text{num2} = 2.45$ ,  $\text{temp}$

Step 3: Set  $\text{temp} = \text{num1}$

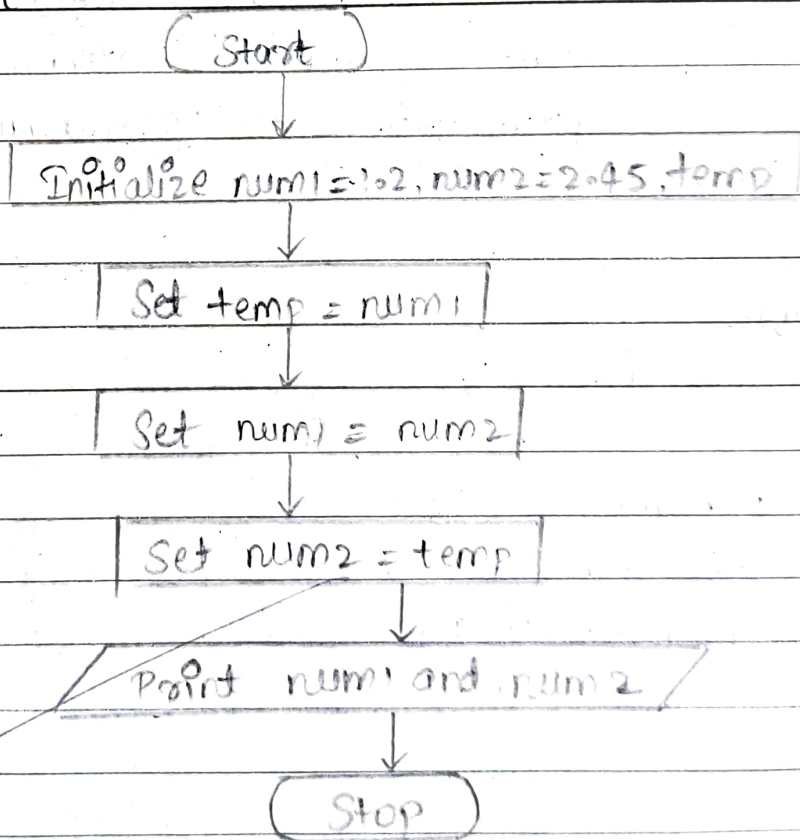
Step 4: Set  $\text{num1} = \text{num2}$

Step 5: Set  $\text{num2} = \text{temp}$  and then  $\text{num1} = \text{temp}$

Step 6: Print  $\text{num1}$  and  $\text{num2}$

Step 7: Stop

### Flowchart



Code

```
public class Swapnumbers
{
    public static void main (String[] args)
    {
        float first = 1.20f, second = 2.45f;
        System.out.println ("-- Before Swap --");
        System.out.println ("First number = " + first);
        System.out.println ("Second number = " + second);
        float temporary = first;
        first = second;
        second = temporary;
        System.out.println ("-- After Swap --");
        System.out.println ("First number = " + first);
        System.out.println ("Second number = " + second);
    }
}
```

Output

```
-- Before Swap --
First number = 1.2
Second number = 2.45
-- After Swap --
First number = 2.45
Second number = 1.2
```

```
C:\Users\bmsce\Desktop\1bm22cs029>javac SwapNumbers.java
```

```
C:\Users\bmsce\Desktop\1bm22cs029>java SwapNumbers
```

```
--Before swap--
```

```
First number= 1.2
```

```
Second number= 2.45
```

```
--After swap--
```

```
First number = 2.45
```

```
Second number= 1.2
```

```
Akshara Singa
```

```
1BM22CS029
```