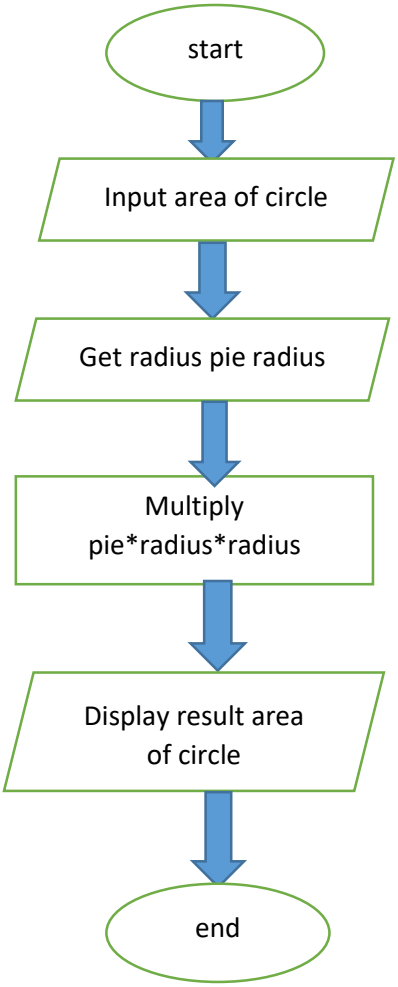
TASK 1:

Make a Flowchart with pseudo-code. Write a program that calculates the area of a circle

- area = $\pi \times \text{radius}^2$

solution:



PSEUDCODE:

Get

Pie,radius,radius

Multiply pie * radius * radius

Store area of circle

Display result

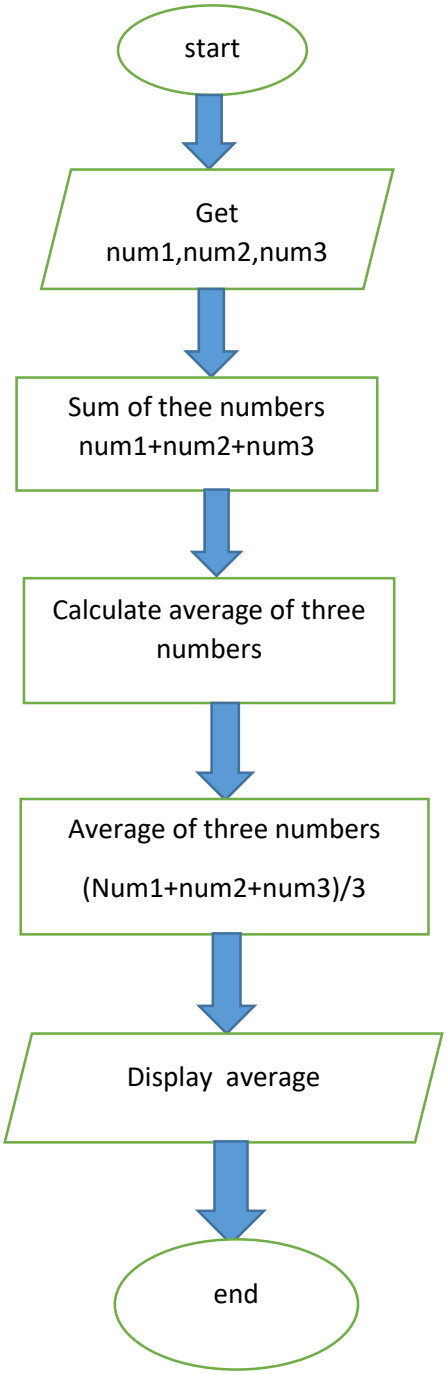
Area of circle

End

Task 2:

Creating flowchart and pseudo code for program that calculates and displays the average of three numbers. The program should take three numbers as input from the user and then compute their average.

The average of the three numbers using the formula: Average = (Num1 + Num2 + Num3) / 3.



PSEUDOCODE

Get

Num1,num2,num3

Compute

Add three numbers

Num1+num2+num3

Divide by 3

(Num1+num2+num3)/3

Display result

Average of three numbers

End

Task3:

Given the expression **x = y * 2 - z / 3**, where , **y**, and **z** are equal to 5, calculate the value of **x**.

Solution:

x= 5*2-5/3

= 10-5/3

=10-1

x= 9

task4:

Create an expression with a mix of addition, subtraction, multiplication, division, and modulus operators, AND operator, OR operator, and challenge students to simplify and calculate the final result.

Expression: ((12 - 3) * 4 / 2 + 5) && (3 < 4 || 7 >= 8)

OR

Expression: ((8 * 2) / 4 + (10 % 3)) || (6 == 6 && 3 > 2)

Solution:

(9*4/2+5) && (true || false)

(36/2 +5) && (true)

(18+5) && true

23 && true

True

(16/4+1) || true && tue

4+1 || true

5 || true

True

True || True

True (answer)