# Experiment - 1.1.1. Area of Circle

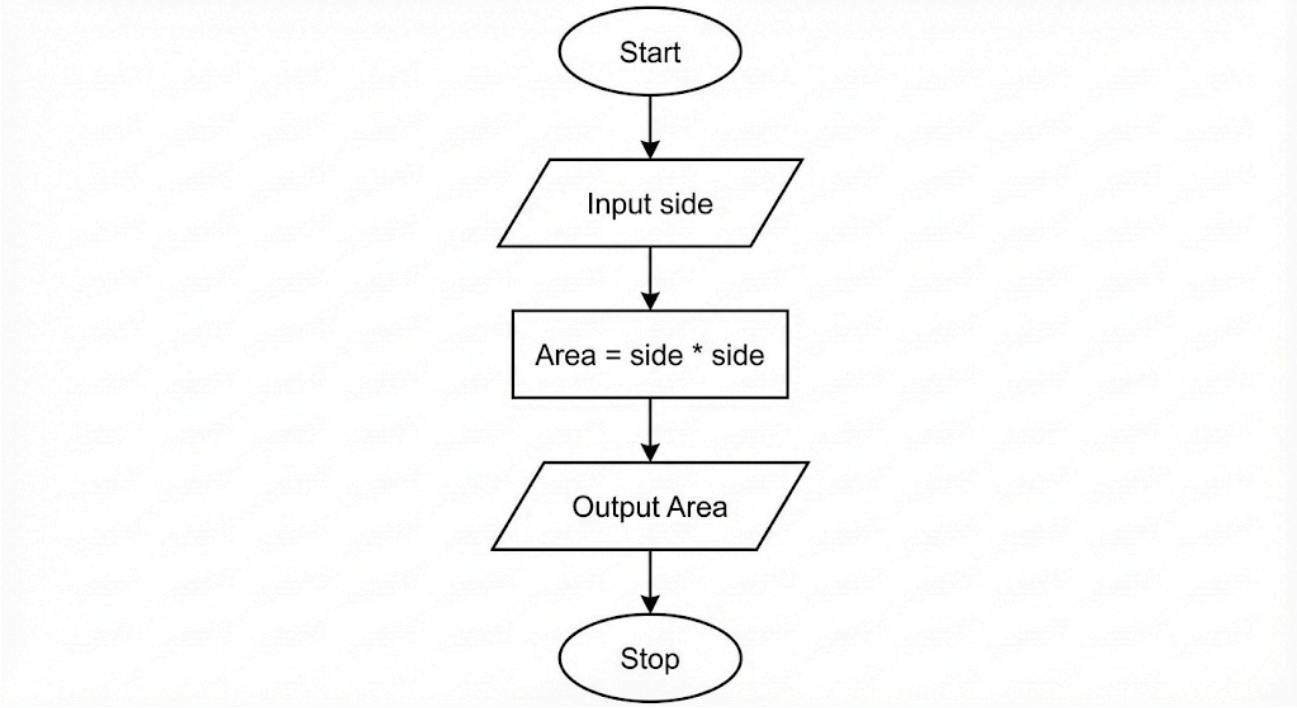
## 1. Aim

To write a Python program that calculates the area of a circle given its radius as input from the user, using the constant value of $\pi = 3.14$ and displaying the result formatted to four decimal places.

## 2. Pseudocode

1. **START**
2. **READ** the input value from the user and convert it to a floating-point number.
3. **STORE** the value in a variable named radius.
4. **DEFINE** a constant variable pi and assign it the value 3.14.
5. **CALCULATE** the area using the formula: $Area = \pi \times radius \times radius$.
6. **FORMAT** the resulting area to 4 decimal places.
7. **PRINT** the formatted area.
8. **END**

## 3. Flowchart



# 4. Python Program

```
# Program to calculate the area of a circle
# Input: Radius as a float
# Output: Area formatted to 4 decimal places

# Taking input from the user
radius = float(input())

# Constant value of Pi
pi = 3.14

# Calculating area
area = pi * radius * radius

# Displaying the result formatted to 4 decimal places
print(f"{area:.4f}")
```

# 5. Experiment Screenshot