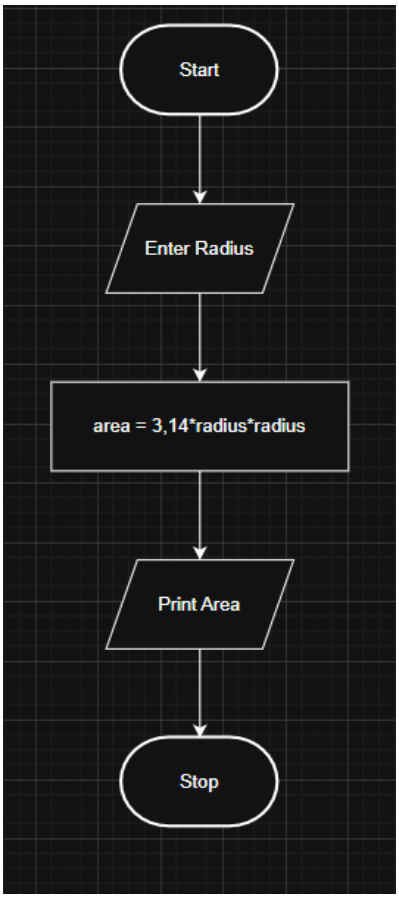
1.1.1 Area of circle

Algorithm:

1. Start.
2. Declare variables radius,area.
3. Set the value of pi = 3.14.
4. Read the Radius from the user.
5. Calculate the area using the formula (area = 3.14 * radius *radius).
6. Display the calculated area.
7. Stop.

Flowchart:



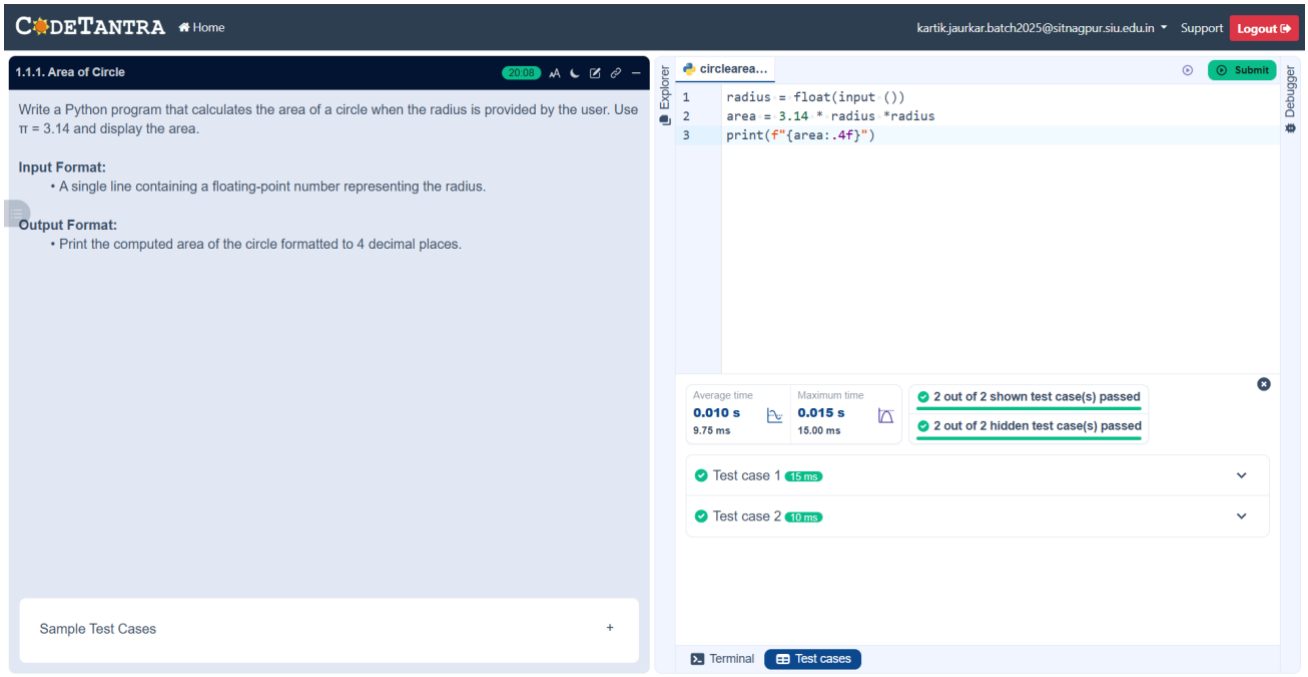
Code:

```
radius = float(input())
area = 3.14 * radius *radius
print(f"{area:.4f}")
```

Execution:

Kartik Jaurkar PRN :25070521146 C1

EXPERIMENT 1

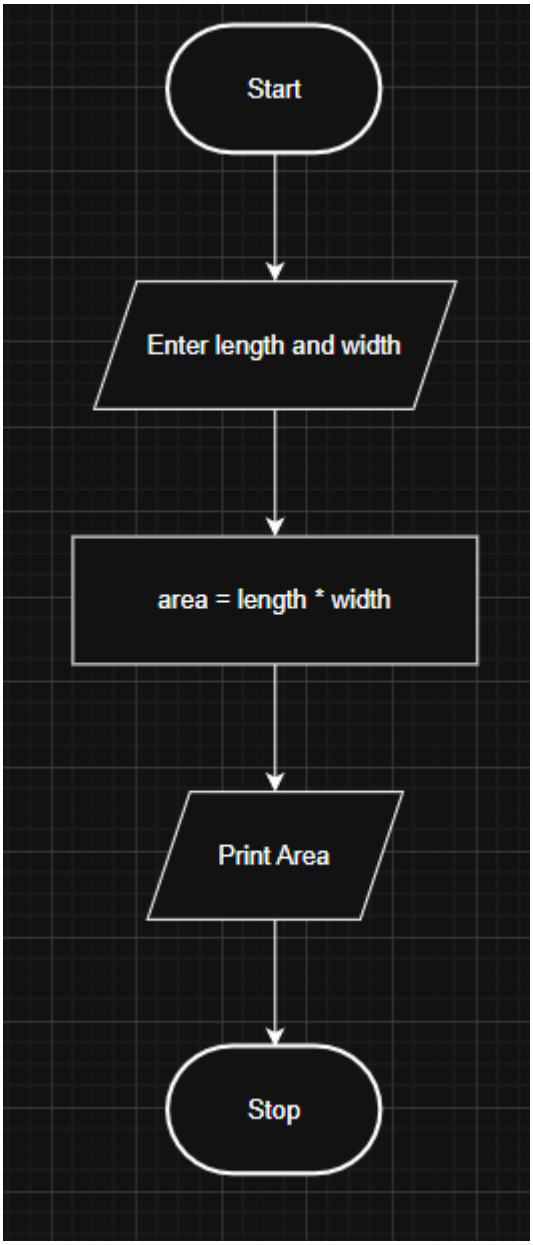


1.1.2Area of Rectangle :

Algorithm:

1. Start.
2. Read the length and width of rectangle from the user.
3. Calculate the area using the formula(Area = length * width).
4. Display the calculated Area.
5. Stop.

Flowchart:



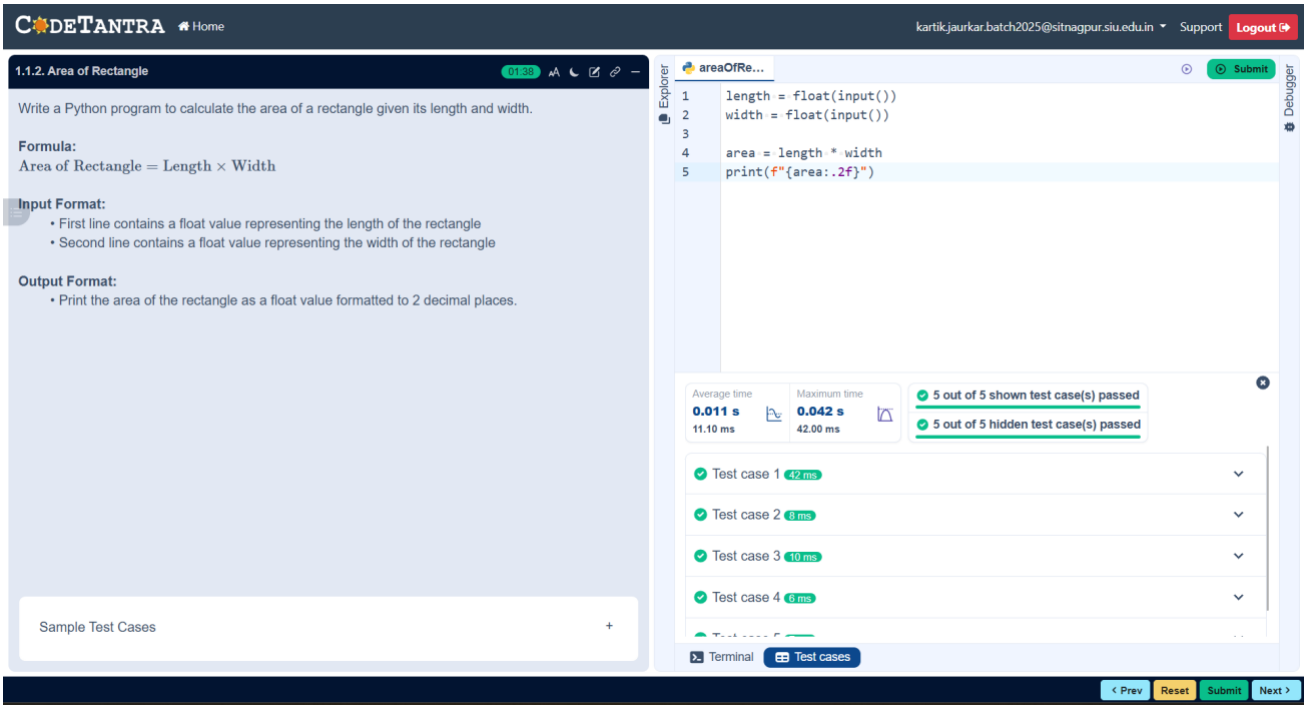
EXPERIMENT 1

Code:

```
length = float(input())
width = float(input())

area = length * width
print(f"{area:.2f}")
```

Execution:

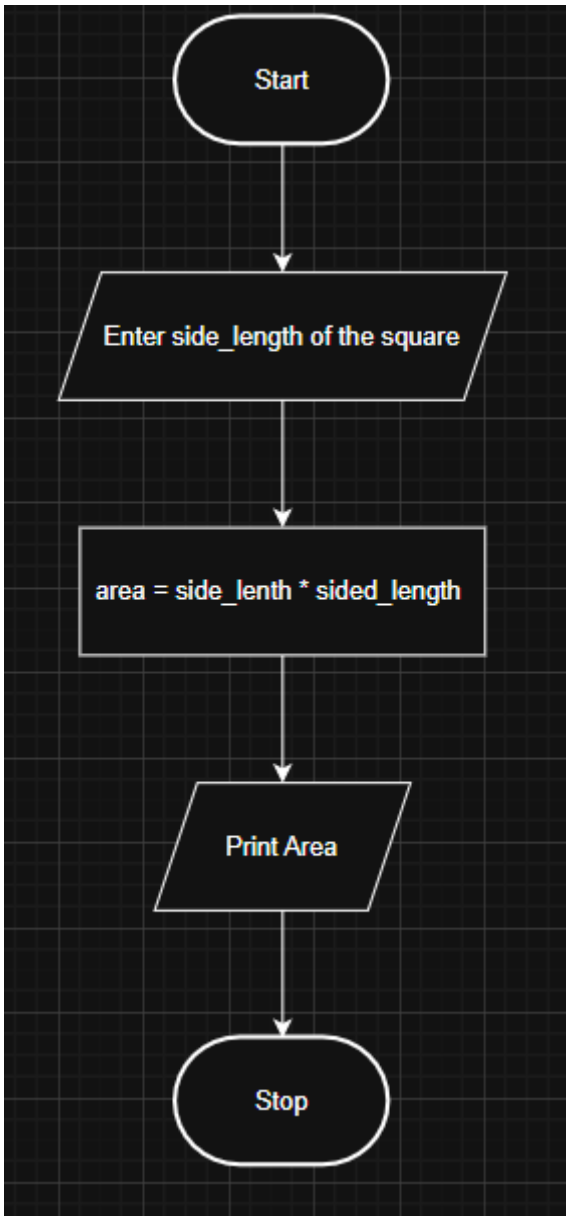


1.1.3 Calculate Area of Square :

Algorithm:

1. Start.
2. Declare variable side_length.
3. Read the value of the side_length from the user.
4. Calculate the area using the formula (area = side_length * side_length).
5. Display the calculated area.
6. Stop.

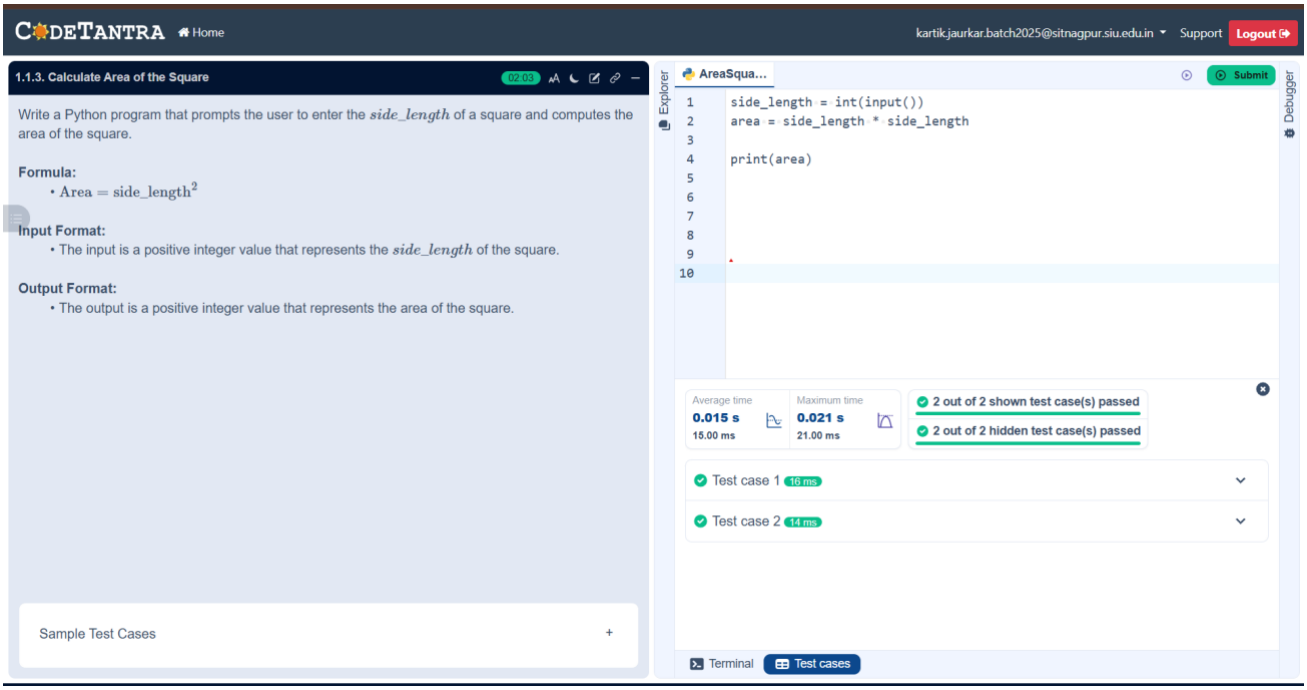
Flowchart:



Code:

```
side_length = int(input())
area = side_length * side_length
print(area)
```

Execution:

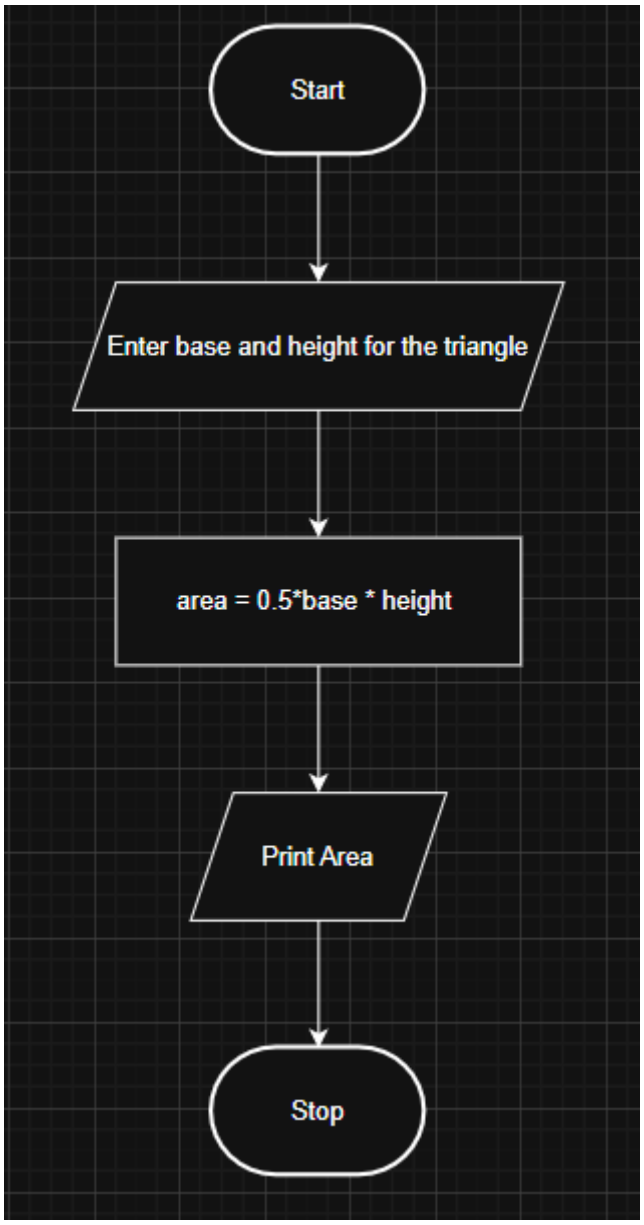


1.1.4 Area of Triangle:

Algorithm:

1. Start.
2. Declare the variables base , height , area.
3. Read the value of base and height from the user.
4. Calculate the area using the formula (area = 0.5 * base *height).
5. Display the Area
6. Stop.

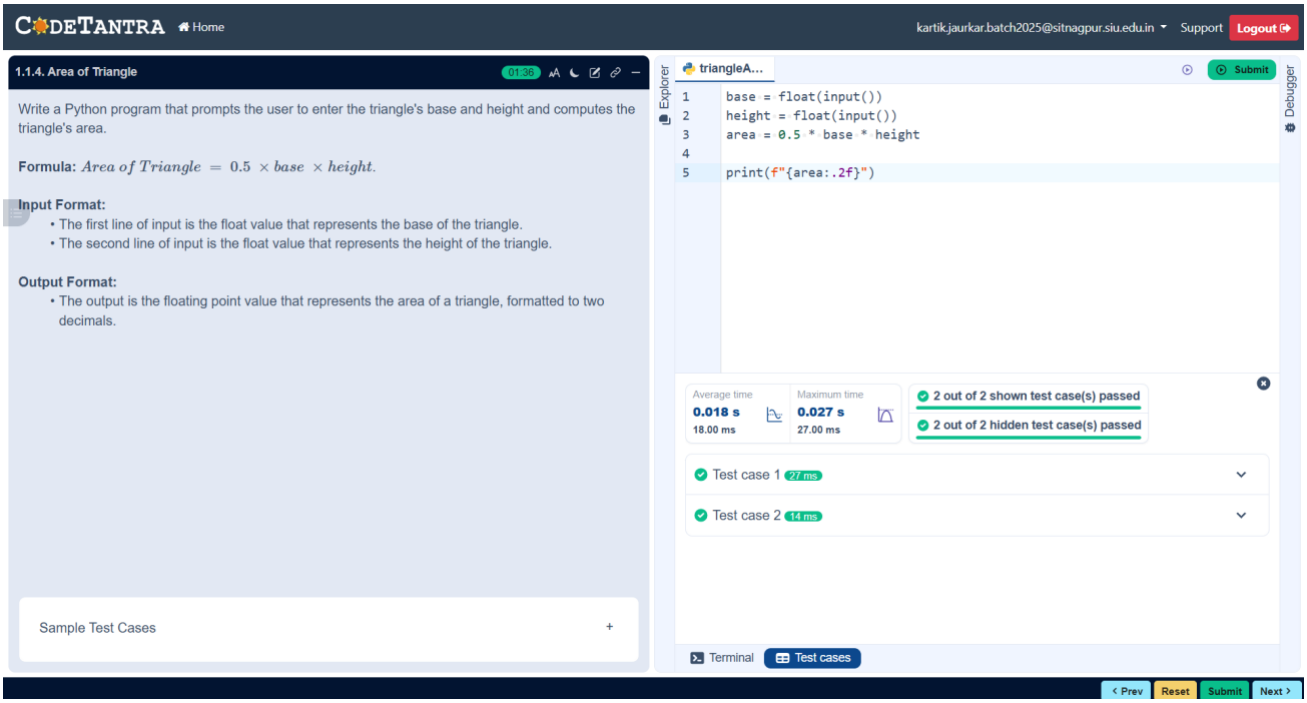
Flowchart:



Code:

```
base = float(input())
height = float(input())
area = 0.5 * base * height
print(f"{area:.2f}")
```

Execution:

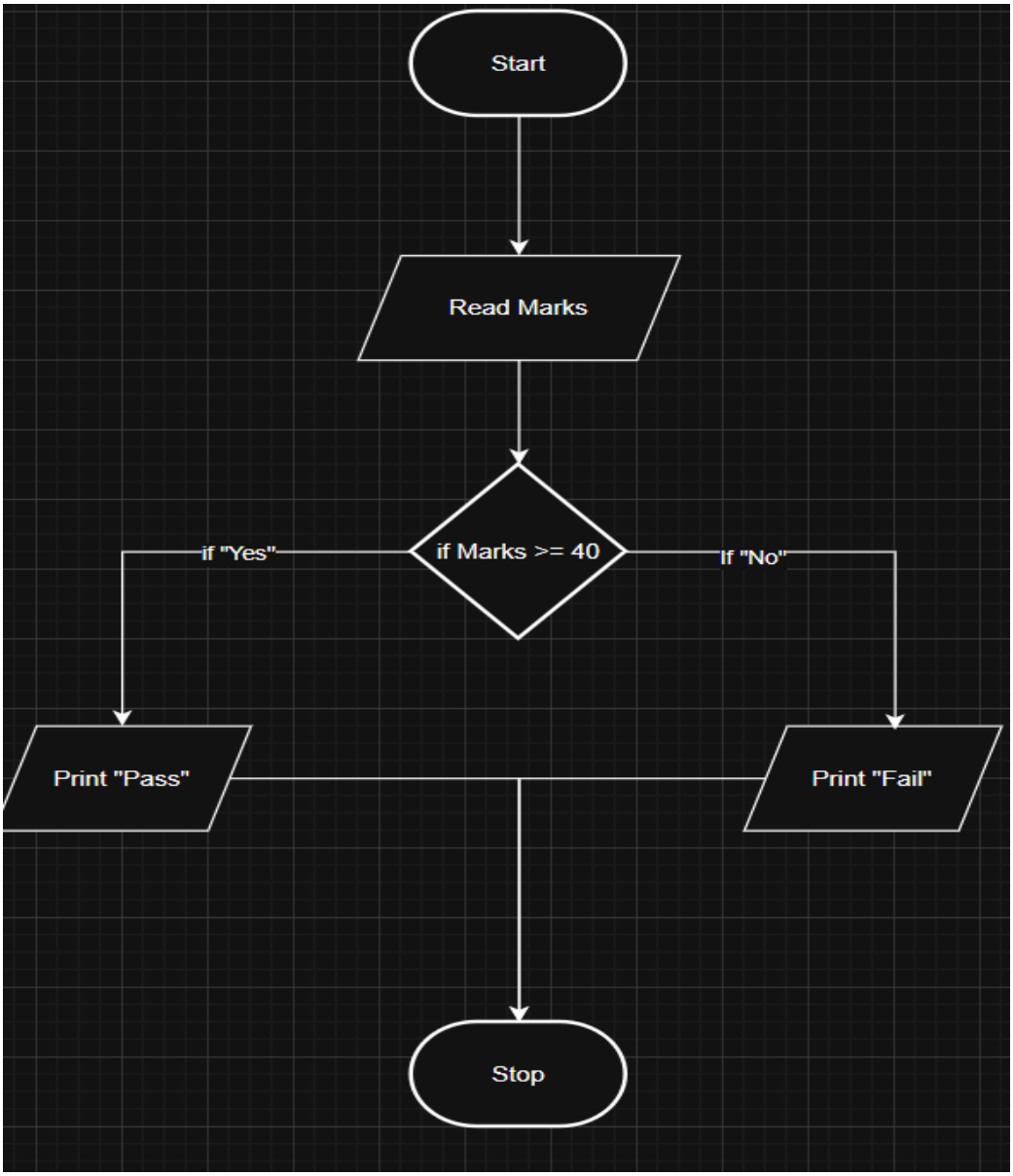


1.1.5 Student pass or fail Status:

Algorithm:

1. Start.
2. Declare variables Marks.
3. Read the marks obtained by the student .
4. Check condition :
    - If marks >= 40 , then print “Pass”.
    - Else print “Fail”
5. Stop,

Flowchart:



Code :

```
marks = int(input())

if marks >= 40:
print("Pass")
else:
print("Fail")
```

Execution: