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| EX:NO:6c | Implementing programs using Functions. (Area of Shape) |
| Date: |

**Aim:**

To Implement programs using Functions. (Area of Shape)

**Algorithm:**

**Step1:** Start the program

**Step2:** To calculate the area of different shapes in Python, you need different

formulas for each shape.

**Step3:** Depending on the shape you're working with, you'll need to use the

appropriate formula.

**Step:4** We have used shapes Rectangle, Circle, Triangle in our exercise

and we have Calculated their Area of Shape using appropriate formula.

**Program: 1 [RECTANGLE]**

def rectangle\_area(length, width):

return length \* width

# Example usage:

length = 5

width = 3

area\_rectangle = rectangle\_area(length, width)

print(f"The area of the rectangle is: {area\_rectangle}")

**Program: 2 [CIRCLE]**

import math

def circle\_area(radius):

return math.pi \* radius\*\*2

# Example usage:

radius = 4

area\_circle = circle\_area(radius)

print(f"The area of the circle is: {area\_circle}")

**Program: 3 [TRIANGLE]**

def triangle\_area(base, height):

return 0.5 \* base \* height

# Example usage:

base = 6

height = 8

area\_triangle = triangle\_area(base, height)

print(f"The area of the triangle is: {area\_triangle}")

**Result:**