

LAB 1- Program to calculate area of triangle, rectangle and circle

Logic of Program

1. Ask user to enter the shape for which he or she want to compute area
2. Check whether the input is correct.
3. If yes
 - Take input from user for the parameters require to compute the area
 - Print the output
4. If no
 - Ask user to give valid input

In [1]:

```
ch = int(input("Enter the shape for which you want to compute area:\n 1 - for Triangle\n 2 - for Rectangle\n 3 - for Circle\n"))
if ch is 1:
    base = float(input("Enter base of the triangle: "))
    height = float(input("Enter height of the triangle: "))
    area1 = 0.5 * base * height
    print("Area of triangle with base {} and height {} is {} sq. cm".format(base,height
,area1))

elif ch is 2:
    leng = float(input("Enter lenght of the rectangle "))
    b = float(input("Enter width of the rectangle "))
    area2 = leng * b
    print("Area of rectangle with length {} and width {} is {} sq. cm".format(leng,b,ar
ea2))

elif ch is 3:
    radius = float(input("Enter radius of the circle "))
    area = 3.14 * radius * radius
    print("Area of the circle with radius {} is {} sq. cm".format(radius,area,3.14*radi
us*radius))

else:
    print("Invalid Input")
```

Enter the shape for which you want to compute area:

- 1 for Triangle
- 2 for Rectangle
- 3 for Circle

2

Enter lenght of the rectangle 10

Enter width of the rectangle 50

Area of rectangle with length 10.0 and width 50.0 is 500.0 sq. cm

In []: