# Shape Calculator

Monday, December 13, 2021 3:19 PM

This is an example of a basic area of a shape calculator:

In [2]:
```
print("This program will output the area of a shape based on user output")
#Shape selection
print("Please select the shape you with to find the area of", "\n1: Square", "\n2: Rectangle",
"\n3: Circle", "\n4: Triangle")
#Variable for the shape
shape = input()
#else if statement
if shape == "1":
    print("What is the squares length?")
    sLength = float(input())
    sArea = sLength * 2
    print("The area of the square is", sArea)
elif shape == "2":
    print("What is the rectangles length?")
    recL = float(input())
    print("What is the rectangles height?")
    recH = float(input())
    rArea = recL * recH
    print("The area of the rectangle is", rArea)
elif shape == "3":
    print("What is the circles radius?")
    radius = float(input())
    Carea = 3.142 * (radius**2)
    print("The area of the circle is", Carea)
elif shape == "4":
    print("What is the triangles height?")
    triH = float(input())
    print("what is the triangles base?")
    triBase = float(input())
    tArea = (triH * triBase)/2
    print("The area of the Triangle is", tArea)
```

Out[3]:
```
This program will output the area of a shape based on user output
Please select the shape you with to find the area of
1: Square
2: Rectangle
3: Circle
4: Triangle
```
In [3]: 3
Out[3]: What is the circles radius?
In [3]: 33.3
Out[3]: The area of the circle is 3484.1323799999996

Like the full basic calculator it uses `if` and `elif` statements with conditions for each shape. Bodmas order of operations is adhered to.