**Returning a Value \*\* Save all your programs \*\***

* 1. Calculate the area of a circle, given its radius as a parameter. Name the function area\_circle(r) and return area. In the main program, test your function with these values: r=1 and r=5. The area should be 3.14 and 78.54 respectively. In other words, do the following:

# Calculate the area of a circle given the radius

def area\_circle(r):

your calculations

return area

# Main program

area1 = area\_circle(1)

area2 = area\_circle(5)

print(area1, area2)

* 1. Calculate the surface area of a cylinder, given its height and radius as a parameter. Name the function sa\_cylinder(height, radius) and return surface\_area. In the main program, test your function with these values: h=4, r=10 and h=1, r=1. The surface area should be 879.6 and 12.56 respectively.
  2. Calculate the volume of a rectangular prism, given its height, width and depth as parameters. Name the function v\_rect\_prism(length, width, height) and return volume.   
     In the main program, test your function with these values: l=4, w=5 and h=10.   
     The surface area should be 200.
  3. Determine the time for an object, thrown with velocity v from an initial height h, to hit the ground using the formula: = 0. Hint: Use quadratic formula. Name the function find\_time(v, h) and return time. In the main program, test your function with these values: v=10, h=1. The answer should be 2.14.