

ASSIGNMENT 4: DEFINING FUNCTIONS

1. Write a program that contains the following two functions and test them:

```
1  #check whether three sides of a triangle are valid?
2  def isValid(side1, side2, side3):
3      # return True if three sides of a triangle are valid?
4      # otherwise return False
5
6  #Calculate area of a triangle
7  def area(side1, side2, side3):
8      # Call function isValid() to check inputs
9      # compute area if inputs are valid
10     # otherwise, displays that the "inputs are invalid"
11
12  # Enter three sides and call func area()
```

Sample Output 1:

Enter three sides: 1, 3, 1
Inputs are invalid

Sample Output 2:

Enter three sides: 1, 1, 1
The area of the triangle is 0.43

2. Write a function that takes an integer n and returns a random integer with exactly n digits.

Sample Output:

ndigit_random(2) → 34, ndigit_random(3) → 345, ndigit_random(4) → 4567

3. Write a function **even_digits(n)** that counts the number of even digits in n.

Sample Output:

even_digits(1234) → 2 , even_digits(1357) → 0

4. Write a function called **number_of_divisors** that takes an integer number and returns how many divisors the number has.