

2494 - COMPUTATIONAL THINKING & DATA SCIENCE

2020-21, Spring Semester

In-class Exercises

INTRODUCTION

- 1. Write a short Python function that takes a positive integer n and returns the sum of the squares of all the positive integers smaller than n.
- 2. Write a short Python program to check if a positive integer n is a perfect square.
- 3. Write a Python program that takes the three sides of a triangle. Start by checking if it is a valid triangle or not (remember that a triangle is valid if sum of its two sides is greater than the third side). Then, classify the triangle according to the size of its sides (Equilateral, Isosceles or Scalene Triangle). Finally, complement your program to check if the triangle is a right one or not (one of its internal angles is 900) by using the Pythagorean Theorem.