Seminar 01 Simple problems

Solving simple problems with Python



Objectives

Using Python to solve simple problems

- Implement simple programs using Python
- Solve simple problems using conditional statements and loops



Requirements

Solve the following problems:

- 1) Given 2 integers, return True if one of them is 10 or if their sum is 10.
- 2) Compute the sum of the first *n* natural numbers.
- 3) Verify if a given number is perfect square.
- 4) Find the highest prime number, smaller than a given **n**.
- 5) Given a non-empty string like "Code" return a string like "CCoCodCode".
- 6) Given 2 strings, return the number of the positions where the two strings contain the same substring of length 2. Example: "xxcaazz" and "xxbaaz" yield 3, since the "xx", "aa", and "az" substrings appear in the same place in both strings.
- 7) Return the number of even integers in a list.