ISM
INTERNATIONAL
SCHOOL OF MANAGEMENT

Programming Task 1/3 (11 points)

Topic: Math, If, While, For, Functions

Please code in a readable programming style using comments.
Do not copy code from any other person. Otherwise, you will get 0 points.
Write your credentials (use # Your Name, Student ID and Mail) at the beginning of every ".py" file.

Deadline for submission: **29.11.2020** until **12:00 p.m.** (midnight) via email:

For Campus **Dortmund**: marcus.becker@ism.de

1.1 Write a program "CheckPrimeNumber.py" **without** using functions. This program should comprise following tasks:
(6 points)

a) Ask the user for an input number. The input number should be a positive integer number. Please check if the input number is a positive integer number greater than 1. If not, print that the input is invalid and ask the user to input a valid number.

b) Then it should be determined, whether the number is a prime number or not. Display a statement, if the number is a prime number or not.

c) If the input is not a prime number, explain why it is not a prime and display the previous as well as the next prime number.

Hint: A prime number is a positive integer number larger 1, which divisors are just 1 and the number itself.

1.2 Same Task as in 1.1, but this time **with the use of functions**. You may use the published stub file.
(5 points)