MEK1300 – Programming 1

Programming Project 1

Fall 2020

Due: Sunday, 04 October 2020 23:59

Guidelines and warnings:

- Use your own approach and algorithm to write the code.
- You **are not allowed** to use concepts and topics we have not covered in the course yet such as list, tuple, set, dictionary, and classes etc. Use whatever you have learnt from the beginning of the semester up until the end of chapter 5 (functions) in a way that makes your job easier.
- Group members should discuss the problem together to come up with a solution (an algorithm) before writing the actual code.
- Any copies from the internet or other groups will give you an automatic **FAIL** for the project for every involved party (the giver and the taker).
- **Each group** must submit **one python file** (e.g. **project1.py**) at the end including the source code of the project.
- It is your responsibility to make sure that your code is **error-free** for any input provided by the user.
- The submission will be done electronically to Canvas.

Project description

Number Guessing Game

This project uses **random module** in Python to randomly generate **an integer** between 1 and 1000. Note that the number is unknown to the user and he/she should guess what that number is in a **maximum of 5 guesses**. If the user's guess is wrong, the program should provide some sort of indication as to how wrong (e.g. The number is too high or too low). After each wrong guess, the program should also print how many attempts are left for the user to guess the number again. If the user cannot guess the correct number in five attempts, the program should print the message "**Sorry!! You did not manage to guess the number. You have reached the guessing limit**" and prints the number itself. If the user guesses correctly (in maximum five attempts), the program should print the message "**Congratulation! You guessed the number in ** attempt(s)**" (the number of attempts used to guess the number should be printed instead of **). The program should also print the number itself in the end. Finally, the program should ask the user if he/she wants to play the game again. If the answer is "YES", the user must be able to play the game (a new game) again and has 5 attempts to guess a new number randomly generated by the program. The program should be repeated as long as the user wants to play the game again and again.

Lykke til 😊