

GUESS THE NUMBER GAME

1. Objectives

This exercise is intended to help you solve the assignment in the session. Use conditional and iteration algorithms, string manipulations and methods having a parameter and a return type.

2. Description

In this exercise, we program a simple game. The program generates a random number between 0 and 99 and the player has to guess that number. Every time the player makes a guess, the program checks whether the given number is:

- **the same as the random number**: the user receives a congratulation note and then has the option of continue with a new round or exiting the game,
- **higher or lower than the random number**: The program writes a message to the user "Too high!" or "Too Low".

```
Guess the Number
                                                       ----- GUESS THE NUMBER -----
  The computer selects a random value between 0 and 99
  You have guesss the number. The game will help you
  by letting you know if the guess number is too high
  or too low! It also displays the number of attempts.
  the game stops and you replay.
       ----- GUESS THE NUMBER -----
Attempt no. 1, Your guess (0 - 99): 50
Too low!
Attempt no. 2, Your guess (0 - 99): 80
Too high!
Attempt no. 3, Your guess (0 - 99): 60
Too low!
Attempt no. 4, Your guess (0 - 99): 70
Too low!
Attempt no. 5, Your guess (0 - 99): 75
Too high!
Attempt no. 6, Your guess (0 - 99): 73
 ++++++ Congratulations! +++++++
Play again (y/n)? 🗕
```



3. Requirements

- Create at least two classes with a Main method and one for the game.
- Use only private fields.
- Write a method for every task. Write as many methods as you can.

4. Help and submission

To generate a random number use the following statement:

```
private Random random = new Random ( );
```

The Random class in C# has several methods: The method **random.Next** gives an int between a start and an end limit (not including the upper limit). Its method **NextDouble** generates a number between 0 and 1 (not including 1).

To get a number between 0 and 9, the generated number is to be multiplied by 10, for numbers between 0 and 99 by 100, and so on.

A solution to this exercise is available on the course site.. The exercises is not to be submitted.

Good Luck!

Programming is fun. Never give up. Ask for help!

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