## **Monty Hall problem**

The Monty Hall is a brain teaser, in the form of a probability puzzle, loosely based on the American television game show *Let's Make a Deal* and named after its original host, Monty Hall.

The concept of the game is that the player sees three closed doors - behind one is a car, and behind the other two are goats. The game starts with the player getting to choose a door, without opening it. Then the presenter opens one of the two remaining doors (but never the one with the car) and shows that this door does not contain profit. The player is then given another choice to change the door.

The question is whether the chances of winning increase if the player changes the door.

Source: https://en.wikipedia.org/wiki/Monty Hall problem

## So the task is:

Build an application that proves the paradox. The application should be able to simulate a given number of games and whether you change the door or not. The technical requirement for the solution is to build an application with a backend of your choice, preferably C#. In the interface you should be able to enter a number of simulations and choose whether or not to change the door. Then be able to press a button that starts the simulation by calling backend that performs the requested number of simulated games. When backend answers then the results of the simulations should be printed. Testing should be included in the assignment.

