

Problem Statement

Monty Hall problem

When a contestant is to choose one of three gates, which behind one of them is a prize, one can choose strategy as a result of the rules of the game. After the initial choice of the gate one of the remaining gates that *has no car behind it* gets revealed. Now the strategy is either to keep the initial gate or switch.

The most effective strategy *in the long run* is to ALWAYS SWITCH. This is because, one has always $2/3$ chance of winning by switching. This is obvious because, there is $1/3$ chance of finding the prize which is behind 1 of the 3 gates, that means that there is $2/3$ chance of NOT finding the prize. If we set our goal to NOT find the prize, and then switch when the empty gate opens, we will win with a $2/3$ probability, because there is $2/3$ chance of not finding the prize!

Rock Paper Scissors

Alternative Solutions

Construction/Implementation

Attachments

Lab Notes, HelloWorld.ic, FooBar.ic

References

- [1]
- [2] Flueck, Alexander J. 2005. *ECE 100*[online]. Chicago: Illinois Institute of Technology, Electrical and Computer Engineering Department, 2005 [cited 30 August 2005]. Available from World Wide Web: (<http://www.ece.iit.edu/~flueck/ece100>).