

# ETC 2420/5242 Lab 2 2016

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*Week 2*

## Purpose

This lab is an introduction to simulation. We are going to create a version of the famous game Monty Hall.

## Description of the game

Suppose you're on a game show, and you're given the choice of three doors: Behind one door is a car; behind the others, goats. You pick a door, say No. 1, and the host, who knows what's behind the doors, opens another door, say No. 3, which has a goat. He then says to you, "Do you want to pick door No. 2?" Is it to your advantage to switch your choice? Source: wikipedia

## Question 1

- Write a function that will sample randomly one value from a the choice of `{pig, pig, car}`.
- Run this function 20 times and report the proportion of times that `car` is selected.

## Resources

- R Bloggers post
- Web app where you can play the game