

# R language and data analysis: simulation

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# Simulation

- coin flip

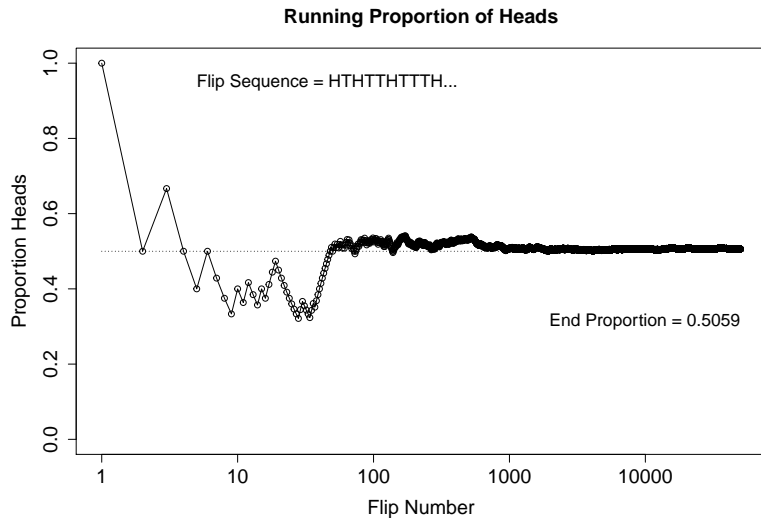
# coin flip



# coin flip

- HTTTTTTTH vs. HTTHTHTHT

# coin flip simulation



# Simulation

- coin flip
- Monty Hall problem

## movie: 21



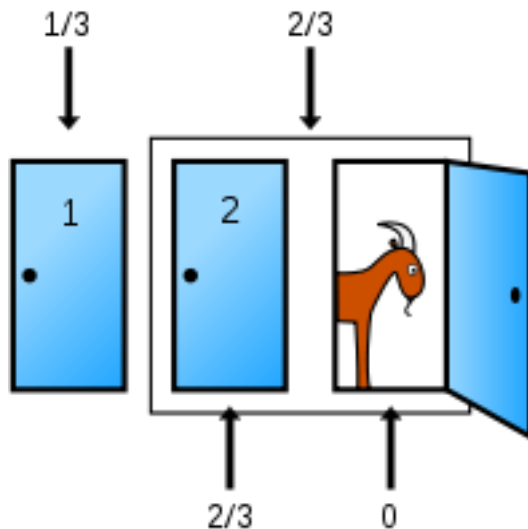
[https://www.youtube.com/watch?v=Zr\\_xWfThjJ0](https://www.youtube.com/watch?v=Zr_xWfThjJ0)

# Monty Hall problem

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?



# Monty Hall problem



# simulation

noswitchwin  
308

switchwin  
692

