

## Test your programming skills

A mouse enters this maze at A and keeps moving. When he gets to an intersection he takes either of the two paths in front of him with the same probability but he doesn't turn back. He can get out of the maze only at A or B. What are the chances that he exits the maze B?

**Hint 1**: Use a Random number to decide which path the mouse takes. E.g. if you generate random numbers between 0 and 1, you can choose the numbers less than 0.5 to go one way and more than 0.5 to take the other path.

**Hint 2:** Calculating the probability that the mouse comes out at B is the same as running a very large number of experiments and calculating the ratio to how many times it comes out at B compared to the total number of experiments.

