RBE 500
HW 8
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Below is my result for my implementation of bayes theorem in MATLAB.

```
Iteration  1
The belief when door is open is 0.33333
The belief when door is closed is 0.66667

Iteration  2
The belief when door is open is 0.76471
The belief when door is closed is 0.23529

Iteration  3
The belief when door is open is 0.61905
The belief when door is closed is 0.38095

Iteration  4
The belief when door is open is 0.97324
The belief when door is closed is 0.026756

Iteration  5
The belief when door is open is 0.99092
The belief when door is closed is 0.0090806

fx >>
```