

Computer Architecture - Assignment 0 Report

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The procedure to find out the result is to run the following commands :

```
>> javac Main.java
```

```
>> java Main
```

This will store the output in result.txt.

Observations

Effect of changing the width of the border

It was observed that as the width of the border was increased the time taken by the infiltrator to cross it also increased.

Effect of changing the probability of the sensor being on

It was observed that as the probability of the sensor being on was increased the time taken by the infiltrator to cross it also increased.

Results

To understand the relationship between the border parameters and the time taken by the infiltrator to cross the border, we simulated the process for probabilities varying from 0.2 to 0.8, and width varying from 2 to 16, with 50 iterations of each combination and calculated the average time.

The results can be seen in the graph below:

