

**Hacettepe University Department of
Computer Engineering
BBM203 Programming Lab.
Assignment 1**

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Submission date : 09/10/17

Due date : 22/10/17, 11:59pm

Advisor : R.A Gültekin Işık

Programming Language : C

Problem:

In the problem we were given, we wanted to solve a labyrinth. In the labyrinth there were various doors and keys of these doors. Doors and keys were marked with letters. The paths that can be traversed are indicated by 0, and the paths that can not be traversed by 1s. To advance from the doors, it was necessary to have the keys of the doors.

Aim:

Only one way to the exit was expected from us. We were not expected to specify the routes that we repeated. We did not want to specify routes that did not go to the exit.

My Solution:

I first read the file char by char. I counted the line numbers in the file to determine the size of the array. I set a square matrix array based on the number of rows. I assigned each char element to a matrix array. I determined the starting point in the matrix array by “startMaze “ function. I set the progression order according to the priority order.

Priority order: “Exit,Keys,Doors,South,East,West,North”

I wrote the conditional algorithm to determine the paths of progress. Tracked path printed to file named "path.txt".

Errors:

- Printing repetitive paths to file
- Some times can't find exit
- Some times can't return the passed ways.