

Artificial Intelligence 1

Lab 1

Name1 (student number 1) & Name2 (student number 2)

Group name

day-month-year

Theory

Exercise 1

Exercise 2

Exercise 3

1. The program finds a path from 0 to 99 and from 0 to 102, using BFS. The found paths are respectively 28091 nodes and 29325 nodes. The program also finds a path from 1 to 0, using DFS. This path has a length of 2 nodes. The other paths are not found, for these the program returns a fatal error, because it does not have enough memory.
2. BFS uses a lot of memory, therefore the solution to why it did not work, is to increase the allocated memory. We multiplied it by a factor of 10. The DFS problem is solved, by making sure that the program does not continuously add 0's and 1's to the end of the stack, because that would mean that all new states would also use 0. The way to solve this, is by making sure that the multiplication uses values bigger than 0, and division only uses values other than 0 and 1.

Programming

Program description

Problem analysis

Program design

Program evaluation

Program output

Program files

Main.c

```
1 Your code here
```

SomeFile.c

```
1 Some other code here
```