

## CS Games 2016



## Relay Programming

Participants	1
Workstations	1
Value	5%
Duration	3 x 1 hour

# Vim Maze Solver

## Problem Description

In this part of the challenge, you must implement a Maze solver in Vimscript.

Your program must read the current buffer from vim and interpret it as a maze. It must then modify the buffer to print a possible path from start to finish. To launch your solver, you must use the `:solvemaze` command.

**Example** of maze file

```
+--+--+--+--+--+--+--+--+--+--+
|SS      |          |      |
+  +--+  +  +--+--+--+  +  +  +
|  |      |  |          |  |  |
+  +  +--+  +  +--+--+--+  +--+
|  |      |  |          |      |
+--+  +  +  +--+  +  +--+--+  +
|      |  |      |  |  |  |  |
+  +--+  +--+  +  +  +  +  +--+
|  |      |      |      |      |
+  +--+--+  +--+--+--+--+--+  +
|          |          |      |
+--+  +  +  +  +--+--+  +  +--+
|          |  |  |      |  |  |
+--+--+--+  +  +--+  +  +  +  +
|          |  |      |      |  |
+  +--+  +--+  +  +--+--+--+  +
|          |      |          |      FF|
+--+--+--+--+--+--+--+--+--+--+
```

`SS` represents the beginning of the maze, and `FF` the end of the maze.

**Example** of a solution for the previous example.

```

+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
|SS#####|#####|      |      |
+  +--+##+##+--+--+--+--+--+--+--+--+--+--+--+
|  |#####|##|#####|      |      |
+  +##+--++##+##+--+--+--+--+--+--+--+--+--+--+
|  |##    |##|#####|      |      |
+--++##+  +##+--++##+  +--+--+--+--+--+--+--+--+
|#####|  |#####|##|  |#####|  |
+##+--+--+--+--++##+##+  +##+##+--+--+--+--+--+
|##|      |#####|#####|#####|
+##+--+--+--++##+--+--+--+--+--+--+--+--+--+--+
|#####|      |      |##|
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
|      |      |      |#####|
+  +--+  +  +  +--+--+--+--+--+--+--+--+--+--+
|      |  |  |      |  |#####|
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+
|      |      |  |      |  |##|
+  +--+  +--+  +  +--+--+--+--+--+--+--+--+--+--+
|      |      |      |      |FF|
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+

```

## Correction

You must turn in your `.vim` files, we will evaluate your work based on the following criteria:

- ☐ Functionality - 50%
- ☐ Efficiency - 20%
- ☐ Optimality of the proposed solution - 15%
- ☐ Code Quality - 15%