

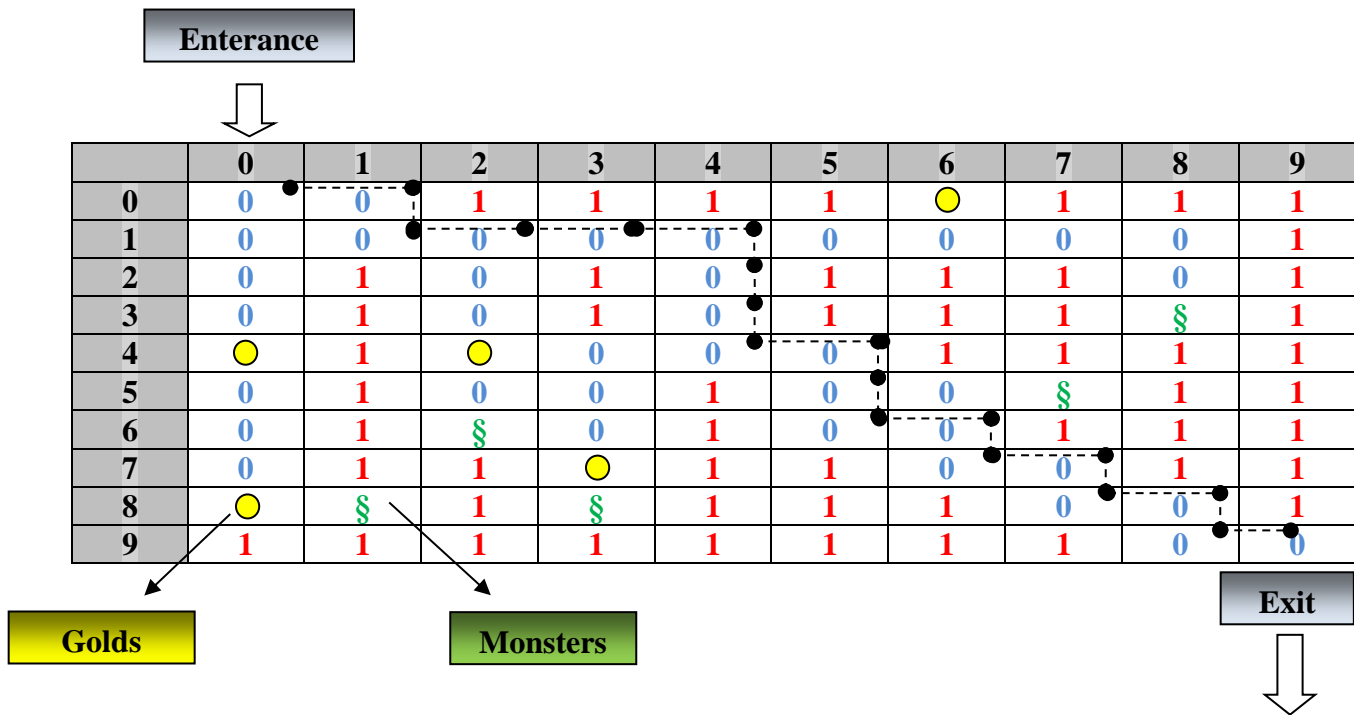


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**ESKİŞEHİR OSMANGAZİ UNIVERSITY**  
**FACULTY OF ENGINEERING AND ARCHITECTURE**  
**DEPARTMENT OF COMPUTER ENGINEERING**  
**152112011 COMPUTER PROGRAMMING LAB**  
**FINAL PROJECT**

		Grade
Finding way out	:	75
Report	:	25
<b>TOTAL</b>	<b>:</b>	<b>100</b>

## PROBLEM

In this project, you are asked to write a program that will try to find a way out without being caught by monsters in a maze defined in a 2-dimensional array (matrix). You must also collect gold while finding your way out. A sample maze could be as follows.



1. In this maze, 1s will be considered as walls and 0s as roads. The program you will write will try to enter from the upper input and exit from the lower exit. The starting point of the labyrinth can be accepted as the (0,0) point and the exit point as the (9,9) point.
2. Labyrinth size will be requested from the user and it will be at least 10x10 and at most 100x100.
3. There should be a visual structure for the game. (May be in command prompt).
4. The player must make the moves.
5. The program should be operable for different labyrinths.
6. There may be a **dead end** in the labyrinth. However, there must be at least one exit in the maze (not necessarily a corner).

7. There will be ***n* monsters** at different locations in the maze. When the monsters are reached, the game should start again.
8. There will be ***m* number of gold** coins in the labyrinth and the collected gold will be counted. At the end of the game, the number of gold collected will be shown to the user.
9. All moves made must be saved in a file.
10. As a result, the output path must be listed as below and saved in a **text file**.

### The Way Out of the Labyrinth

x	y
0	0
0	1
1	1
1	2
1	3
1	4
2	4
3	4
4	4
4	5
5	5
6	5
6	6
7	6
7	7
8	7
8	8
9	8
9	9

**Attention!!**

**You have to do the program yourself and it will be controlled and received by instructor.**

**If it is understood that you did not do the program yourself, your grade will be evaluated as ZERO!!!!**

### **Report Contents**

- Your report have to be max 10 pages with given format in next pages.

### **Report Topics**

- What is the problem (s) that you will deal with? (Explain each problem)
- What model/method/algorithm that you will apply the problem (s).
- Detail of the algorithm flow diagram (s).
- Application: some print screen of your program (s) etc.

PROJECT NAME

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Dr. Yıldırar ANAGÜN

June 2021

## CHAPTER 1

This homework.....