# Homework 3

Class,

As a final modification to our game, we will be adding options to save the game and load a previous game from a file.

1. You must use the following for saved games:
   1. save[#].txt
   2. For example, if there were 3 save files, you would have the following text files available to load into your game:  
      save1.txt  
      save2.txt  
      save3.txt
2. A save file should at least consist of the following:
   1. A maze (game has not been won or lost yet).
   2. A player array (player’s current stats)
3. You should make 2 modifications to your play\_game script
   1. modify your play\_game script so that when you first start it, it asks if you want to load a previous save. If there are no save files present, you should continue to play the game normally.
   2. Modify your play\_game script so that after each turn, it asks if you want to save the game and exit. IF they choose to save, you should then save the player array and the maze to a file and exit the game. You should ONLY save if the game has NOT YET been won or lost.
   3. NO SAVE OPTION FOR AUTOPLAY. The user should ONLY get the chance to save their game if they DO NOT CHOOSE the autoplay feature.

I’ve done part of this for you. Please see my comments and code in **play\_game.m**.

Important lines to read:

**Lines 4 – 24**

* I ask user if they want to load save game
* I make sure there are save files present in directory
* I create a string array where each element is the name of a different save file
* Comments telling you that you must now open the file, scan it, create the appropriate variables from the information in the file
* **TIP**: you may want to look at the **sprintf** function that allows you to create a string similar to how you would write an fprintf statement.

**Lines 59 – 66**

* Comments explaining that you need to save the game here, if they request it.
* DO NOT overwrite a previous save
* If the directory contains 2 saved games (save1.txt and save2.txt), then you should save THIS game as save3.txt.
* **TIP**: you may want to look at the **sprintf** function that allows you to create a string similar to how you would write an fprintf statement.

## Deliverables

ONLY MATLAB FILES

* **create\_maze.m** 🡨 your create maze function
* **random\_move.m** 🡨 your random move function
* **generate\_monster.m** 🡨 your generate monster function
* **play\_game.m** 🡨 your play game script (modified to save games and load saved games)
* ***save1.txt*** 🡨 1 text file where you have saved a game you were playing