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# Introduction:

In this assignment I’ve implemented a popular game called snakes and ladders.

# Language Used:

I’ve used PHP as a programming language because I wanted to add a GUI of HTML 5 canvas but unfortunately I ran short of time and therefore I couldn’t implement the GUI.

# Approach:

An object oriented approach is used. There is a class named myboard that has 1D arrays of snakes heads, ladder heads and snake tales and ladder tails. There is another class named as player that has player name which is usually a number given to it on run time for its identification, it also has a turn and win variable. It has two functions one is throwDice() that generate a random number between 1 and 6 just like a real dice. Another function is playGame() which take a player as an argument. All the rules are implemented in this function.

Moreover, number of players can be changed by changing the value of variable players

Memory usage was found using memory\_get\_peak\_usage () function.

The game prints player name and its position until the game ends and at the end it prints who won and the summary of the game like maximum rounds, minimum rounds and memory usage etc.

# How to run:

It is a php script so it can be simply run by using WAMP server. Put the “game\_05721\_m.umar\_bscs-3a.php” file is www folder and open your browser, write

localhost/ game\_05721\_m.umar\_bscs-3a.php

and it will run perfectly.

# GitHub Link:

https://github.com/13bscsmumar/assignmentAP\_snakeGame