

Gebze Technical University
Department of Computer Engineering
CSE 241/501
Object Oriented Programming
Fall 2021
Homework # 2
Due date Oct 27th 2021

You will **continue** developing your **Peg Solitaire program** with this homework. You will add the following features to your program.

- Your program **should accept commands for loading and saving the game board at any step of the game**. For example, **instead of giving the column letters, if the user enters the command **LOAD FILE.TXT****
your program loads the game board from this file. Similarly, if the user enters the command **SAVE FILE.TXT**
your program saves the current game status to this file. You should save and load all game related information such as human or computer, number of moves, etc.
- It is possible to have arbitrary board types. When loading games, the loaded game information defines the board configuration. For example, the file may contain a board such as below ✓

```
PPP  PP
PPP  PP
PPPPPPPP
PPPP.PPPPP
PPPPPPPP
PPP
PPP
```

Easy

- Your program should have at least one function that takes a parameter by reference and a constant parameter by reference.
- Your program should have at least one function that uses default arguments.
- Your program should have at least one **auto** statement and one **decltype** statement.
- All the errors should be printed to **cerr** object and all the other text should be sent to **cout**.

The rest of the program will be the same as HW1.

Notes:

- Do not use any functions from the standard C library (like **printf**)
- Read the chapter about file input output for reading and writing text files using streams.
- Do not use anything that we did not learn in the lectures.
- Do not forget to indent your code and provide comments.
- Check the validity of the user input and file contents.
- **Test your programs very carefully at least with 10 different runs. Submit at least two saved files with your HW.**
- You should submit your work to the Teams page.