

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
  PPPPPPPPP
PPPP.PPPPPP
  PPPPPPPPP
    PPP
    PPP
```

- 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.