

**Gebze Institute of Technology**  
**Department of Computer Engineering**  
**CSE 241/501**  
**Object Oriented Programming**  
**Fall 2013**  
**Homework # 2**  
**Due date Oct 21<sup>st</sup> 2013**

You will write a C++ program that will play the game of chess. Your program will be very intelligent, it will only make random legal chess moves. Your game will continue making random chess moves until the game ends. Here are some rules for the game

- White starts first
- After each move, your screen is updated with the new board and the move is displayed on the screen
- Your chess game is simplified
  - The game ends when the king is captured, in other words there is no check mate.
  - No castling rules
  - No enpassant rule
  - No pawn promotion rule
  - No check rule
  - No draws

Your screen might look like this

```
k a f v s f v k
p p p p p p p p
. . . . .
. . . . .
. . . . .
. . . . .
P P P P P P P P
K A F V S F V K
```

Move 1

Beyaz E2-E4

```
k a f v s f v k
p p p p p p p p
. . . . .
. . . . .
. . . . P . . .
. . . . .
P P P P . P P P
K A F V S F V K
```

Move 2

Siyah A7-A6

```
k a f v s f v k
. p p p p p p p
p . . . . . . .
. . . . . . .
. . . . P . . .
. . . . . . .
P P P P . P P P
K A F V S F V K
```

Notes:

- Do not use any functions from the standard C library (like `printf`)
- Your program should have only functions and no classes. Your functions should not be more than 50 lines long.
- Do not forget to indent your code and provide comments.
- You should use call by reference and default arguments in your homework.
- If you do not know chess please see the rules of the game at [http://en.wikipedia.org/wiki/Rules\\_of\\_chess#Castling](http://en.wikipedia.org/wiki/Rules_of_chess#Castling)
- Submit a number of tests for your chess game for a complete game.
- You should email your homework to the Teaching Assistant (TA).