

Steps to ensure CVX code works:

- 1.) Please have all the following files in the same folder directory in MATLAB
"Code_Erdogan.m", "Data_Erdogan.m", "NBA_Stats.xlsx",
"2016_Team_Stats.xlsx"
- 2.) Once all the files are in the correct folder and path in MATLAB, run
"Data_Erdogan.m". This file will pull all the data from the excel sheets that are
also in the same MATLAB folder path.
- 3.) When this files finishes running (which may take a few minutes depending
on the hardware of your computer) please make sure that you have a
professional CVX solver set to your default. The CVX code will not work
otherwise since the standard solvers cannot handle binary variables. Please
make sure you have activated the professional license in your version of
MATLAB. An academic professional license is free to get at

<http://www.cvxr.com/cvx/academic/>

Installation instructions can be found at the link below if you need to install a
professional license.

<http://cvxr.com/cvx/doc/install.html#licinstall>

To set MOSEK as your default solver, which is the solver I used, please type
the following code in the command window

```
cvx_solver mosek  
  
cvx_save_prefs
```

- 4.) Now that you have MOSEK as your solver please open up the
"Code_Erdogan.m" file in MATLAB and run it. The output will come up in the
command window. It is displaying the index number of the players that were
selected. Please refer to "Data_Erdogan.m" and look through the code at the
comments to see which index numbers correspond to the players selected. A
table of players and their corresponding index number is also available in the
final report on pages 5 and 6. This is your optimized line up and the answer
to the convex optimization problem.
- 5.) Convince a NBA franchise to give you total control of their team, acquire all
the players selected by CVX, win a NBA championship with your optimized
roster, make millions of dollars and then retire.... just kidding 😊