**Assignment 1 : Regression Assignment**

In this assignment it is required to use regression to estimate house prices using the following training dataset.

[House Prices data set](http://eee.guc.edu.eg/Courses/Networks/NETW1013%20Machine%20Learning/Projects/house_prices_data_training_data.csv)

The data set contains records for 18000 houses. Each record has the house price and 18 different features associated with this house. It this assignment it is required to do the following

Provide at least 4 different Hypothesis for estimating the house prices

Provide a MATLAB function to estimate the Mean square error between the hypothesis and the actual price

Implement a MATLAB to use gradient decent to find the optimal parameters for each Hypothesis The function should produce a graph that indicates the decrease of the error with the number of iterations.

Implement a MATLAB function to implement Normal equation method

The assignment will be evaluated based on practical evaluation in the lab

[Complete Data](http://eee.guc.edu.eg/Courses/Networks/NETW1013%20Machine%20Learning/Projects/house_data_complete.csv)

**Submission Guidelines:**

1. Saturday 9th of February: Submit your code for only 1 hypothesis (solved using linear regression with multiple variables) with all the stated requirements in the assignment.

2. Sunday 10th of February: Individual evaluations will be done in the lab C3.203 during the third slot where you will be assessed on implementing other tasks in the assignment. Practicing all assignment tasks ahead will make your task much easier during the lab.

3. Thursday 14th of February: Submission of complete assignment.

For submission you are required to upload your files and send us a download link via e-mail.