

# The Linear Regression

**Deadline: 21 Nov 2021**

## *SML Lab Assignment 7*

**Instruction:** It is valid for all questions.

1. Apply the Linear Regression approach to solve the regression problem using pen and paper and submit the scan copy. (Only for Question 1)
2. Write the python code and generate the output and submit the colab file and pdf file.

**Q.1** Implement the basic house price prediction through the linear regression model using basic python library function like NumPy, Pandas and matplotlib or seaborn. Write the complete code for Linear Regression and plot the datasets and show the best fit line around the datapoints as linear regressor in the figure.

**Q.2** Find two real-world linear regression datasets from UCI Repository (<https://archive.ics.uci.edu/ml/index.php>) and implement the Linear regression model with the Gradient descent approach. Solve the supervised machine learning regression problem and plot and show the regressor along with the data points on the graph.

-----All the Best-----