# CS306 Data Analysis and Visualization

Lab. 1 Temperature Data Analysis and visualization

**1**. In the provided CSV (Temperature.csv) file , day wise temperature(max and min) data is given (for about 427 days). In this practical we will use excel to perform some basic data analysis and visualization. It is very easy to load a *.csv file in excel and you should be able to do so, on this instant. After that get the results of several statistical measures (of $T_{max}$ and $T_{min}$ separately) like Maximum value, Minimum value , Mode value, Median and Average Temperature values using existing functions in excel.

Our next task is to plot histogram (of $T_{max}$ and $T_{min}$ separately). From the statistical measures (Max and Min) decide bin range and width (you may choose 1-15). Find out the frequency of temperature data lying in that range (you may use frequency function in excel). As we generally prefer Normalized histogram (which can be interpreted as a probability density function (pdf) for several data analysis and interpretation tasks.), we find out the probability for each bin followed by plotting using chart functionality available in excel. Also plot pdf with varying bin size.

You have to plot histogram for at least TWO different bin size. And also comment on both visualization.

☞ (Submit your solution via **Moodle** only before next lab.)