# Assignment-7

## Data Analytics and Visualization (CS/IT312) 2 March, 2022

#### Instructions

- 1. Create "Assignment7\_Branch\_YourId.py" file. *YourId* will be the student ID and *Branch* will be "CS" or "IT". For example, if student ID is 202018001 and Branch is CS, then file name will be "Assignment7\_CS\_202018001.py".
- 2. A student has to write the code for following tasks.
- 3. Upload your "Assignment7\_Branch\_YourId.py" file into the Google form shared on Google class room. Fill the Google form.
- 4. Please be present during lab session. The deadlines of the submission for group 1 and group 2 are 8 days from lab session.

#### Get help from:

Book: chapter 2: Practical Statistics for Data Scientists

Data Source: https://data.gov.in/ and https://www.kaggle.com/ronitf/heart-disease-uci

#### Data:

- Data contains the consumer price indices of various needs of Indian population (*All\_India\_CPI.csv*).
- Data contains house price in Malborn for various house. (Melb\_data.csv)
- Data contains match information of IPL matches played from 2008 to 2020. (IPL Matches 2008-2020.csv)

### **Tasks**

- 1. Compute the correlation coefficients of columns of the "All India CPI" data. Plot the correlation as heat map.
- 2. Compute the Contingency table between "toss winner" and "Winner" columns of the data "IPL Matches 2008-2020" data.
- 3. Plot the hexagonal binning of "Price" and "Landsize" columns of Melborn housing price data.