***Lab 7– Data Visualization***

1. *economics* data set is a data set in the *ggplot2* package which was produced from US economic time series data. Using thisdata set do the following tasks with R’s base graphics and/or *ggplot2* package:
   1. Plot a line for the total population (*pop),* where the x-axis in the plot displays the month of data collection (*date*).
   2. Plot a line for the total population (*pop)* after 2005-01-01. **Hint**: use *filter* function in *dplyr* package.
2. *diamonds* data set is a data set in the *ggplot2* package which contains the prices and other attributes of almost 54,000 diamonds. Using thisdata set do the following tasks with R’s base graphics and/or *ggplot2* package:
   1. Plot a bar chart for quality of the cut (*cut*).
   2. Plot a histogram for weight of the diamond (*carat*)*.*
   3. Plot a histogram for weight of the diamond (*carat*) grouped by diamond clarity (*clarity)*.
   4. Plot a scatterplot to display values for weight of the diamond (*carat*) and the price (*price).*
   5. Plot a scatterplot to display values for weight of the diamond (*carat*) and the price (*price)* grouped by diamond color (*color*).
   6. Plot a boxplot for weight of the diamond (*carat*) grouped by the quality of the cut (*cut*).