

## Lab Assignment No. 9

Title : Data Visualization II

Objectives:

To plot a box plot on an inbuilt dataset and write the inference obtained.

Problem Statement:

Use an inbuilt 'titanic' dataset as used in previous assignment. Plot a boxplot for distribution of age with respect to each gender along with information about weather and whether they survived or not.

Theory:

As we know, data visualization is a technique of translating information or data into a visual context such as map or graph to make data easier to understand and comprehend.

Box Plot (whisker plot):-

1. This is one of the most used plots in the field of data science.
2. It shows distribution of quantitative data in a way that facilitates comparison between variables or across levels of categorical variable.
3. It helps to detect outliers more easily than swarm plots.
4. It creates summary of the set of data values



Topic : \_\_\_\_\_

having properties like min, first quantile, median, third quantile and max.

5. Box is created from the first quantile to the third quantile, a vertical line is also there which goes through the box at the median.

Conclusion:

Thus we have successfully implemented box plot technique to obtain observations through inference from statistics.