Case Study: Titanic Dataset

This case study focuses on exploratory data analysis (EDA) using the Titanic dataset. Below are the guided questions that shape the analysis, covering data exploration, visualization, and preprocessing.

Questions:

1) Load data on Python

2) Print starting 10 rows and last 10 rows

3) Shape of the data

4) Print all columns name

5) Find the data type of all the columns

6) Print information and summary

7) Count Survived and show on pie chart

8) Find out how many female passengers had travelled in first class and show on pie chart

9) Find out how many female passengers had survived and her age <30, show on pie chart and bar graph

10) Find out how many male passengers had survived and his age >40, show on pie chart

11) Show age with 20 bins

12) Show age frequency with survived and not survived (Histogram)

13) Show Bar graph for Survived with male, female, class

14) How many passengers are travelled in different classes show in Bar graph

15) How many passengers are survived with class wise and show in Bar graph

16) Show Question-13 & Question-14 in subplot

17) Show Bar graph for Survived with 3rd class male, 1st class female

18) How many passengers are survived / not survived and they are 1st class female

19) Map the Sex column male=1, female=0

20) Find Null values

21) Replace Null value to Median value

22) Drop unwanted columns