*Session 6: Assignment 2*

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1. Introduction

This assignment will help you to consolidate the concepts learnt in the session.

1. Problem Statement

This assignment is for visualization using matplotlib:

data to use:

url= https://raw.githubusercontent.com/Geoyi/Cleaning-Titanic-Data/master/titanic\_original.csv '

titanic = pd.read\_csv(url)

Charts to plot:

1. Create a pie chart presenting the male/female proportion

2. Create a scatterplot with the Fare paid and the Age, differ the plot color by gender

**Note: The solution shared through Github should contain the source code used**

**and the screenshot of the output.**

**3. Solution:**

**Input-1: Create a pie chart presenting the male/female proportion**

*import matplotlib.pyplot as plt*

*%matplotlib inline*

*import pandas as pd*

*titanic = pd.read\_csv('https://raw.githubusercontent.com/Geoyi/Cleaning-Titanic-Data/master/titanic\_original.csv')*

*female = len(titanic1[titanic1.sex=='female'])*

*male = len(titanic1[titanic1.sex=='male'])*

*fig = plt.figure()*

*chart1 = fig.add\_subplot(1,1,1)*

*chart1.axis('equal')*

*chart1.pie([male, female],labels=['male','female'],autopct='%1.1f%%')*

**Input-2: Create a scatterplot with the Fare paid and the Age, differ the plot color by gender**

*import matplotlib.pyplot as plt*

*%matplotlib inline*

*import pandas as pd*

*titanic = pd.read\_csv('https://raw.githubusercontent.com/Geoyi/Cleaning-Titanic-Data/master/titanic\_original.csv')*

*cond = titanic.sex == 'female'*

*subset\_x = titanic[cond]*

*subset\_y = titanic[~cond]*

*plt.figure(figsize=(20, 15))*

*plt.scatter(subset\_x.fare, subset\_x.age, c='r', label='male')*

*plt.scatter(subset\_y.fare, subset\_y.age, c='b', label='female')*

*plt.title("Fare paid and Age, differed the plot color by Gender")*

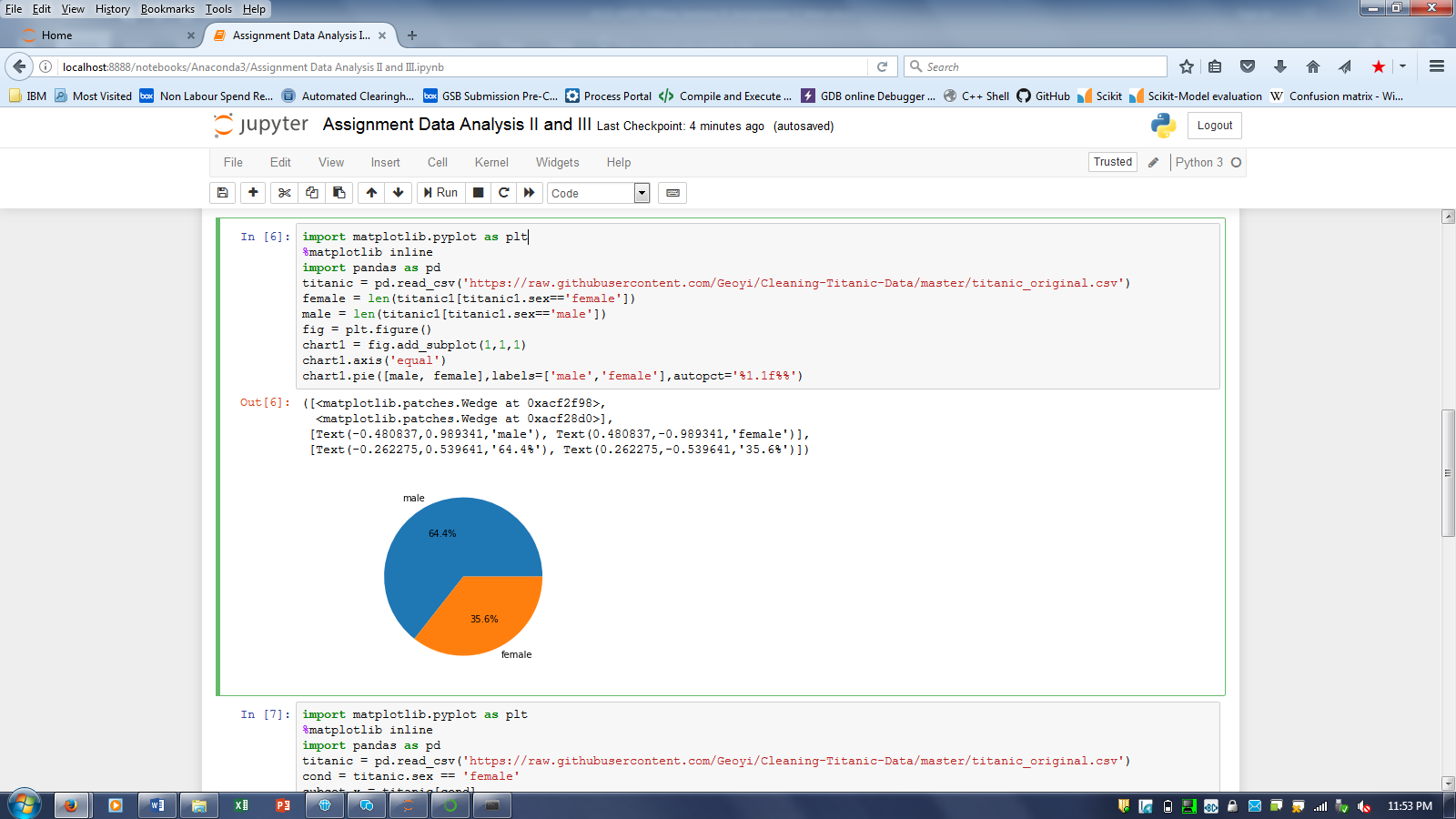
*plt.xlabel("Fare Paid")*

*plt.ylabel("Age")*

*plt.legend()*

**Screen Shots:**

**1. A pie chart presenting the male/female proportion:**



1. **A scatterplot with the Fare paid and the Age, differ the plot color by gender:**

