Predicting the survival of Titanic Passengers

1. Import the needed Python libraries
2. Describe the dataset
3. Display the shape and information of the dataset
4. Display the counts for the number nulls in the data & drop any missing data values.
5. Create a sns countplot of the Survived column
6. Describe the age column
7. Create a scatterplot for age and survived
8. Create a scatterplot for age and survived by age and by Pclass
9. Feature Recode: Male = 1, Female = 2 for regression analysis
10. split the data into X and y
11. split the data into Survived and those who died
12. Display summary of the model
13. Calculate the y predicted values with your logistic model
14. Round y_pred and save the values in y_pred.
15. Calculate the model residuals
16. Find the confusion matrix
17. Print the value for TN, TP, FN, and FP
18. Display the heatmap
19. Print the accuracy score using the formula accuracy_score(y_test,y_pred)
20. Plot the ROC curve
21. Let's see the prediction distribution based on the male gender: Male = 1, Female = 2 for regression