In this homework assignment, you will download the dataset on NewE3 "Titanic Dataset" to solve the following problems.

The explanation of variables as follow：
Name : the name of the passenger
Sex : Sex (male and female)
Age : the age of the passenger
Siblings/Spouses Aboard : Number of Siblings/Spouses Aboard
Parents/Children Aboard : Number of Parents/Children Aboard
Fare : Passenger Fare (British pound)
Pclass: Passenger Class (1 ＝ 1st; 2 ＝ 2nd; 3 ＝ 3rd)
Survived : Survived (0 ＝ No; 1 ＝ Yes)

Analysis the data by Logistic Regression, KNN, Decision tree, random forest, SVM, and neural network.

1. Please do a simple EDA for the dataset.
2. Pre-process the continuous and discrete data.
3. Build the logistic regression model.
4. Predict the data and show the confusion matrix. Please explain it in details.
5. Use KNN, Decision tree, random forest, SVM, and neural network to predict the data and show the confusion matrix. Please explain your results in details.
6. Among all these questions, what is your best result? Explain why you regard it as the best result.