**Section 1.2**

Age\_mean = X\_full.Age.mean()   
X\_full['Age'].fillna(Age\_mean, inplace=True)   
Instead of dropping the age column I replaced the NaN values with the mean value of the passengers age.

**Section 2.2**

Choice of parameters: default   
Accuracy, precision and recall: (0.81716, 0.78125, 0.72815)

**Section 2.4**

Accuracy, precision and recall: (0.82462, 0.81111, 0.70873)   
Higher accuracy and precision, slightly lower recall. For most of my runs the accuracy of the XGB classifier exceeded the RF classifier's accuracy, same thing for the precision. In a slightly lower ratio, the XGB classifier's recall was lower than the RF classifier.

**Section 2.5**

After numerous runs, I came to the conclusion that parameters below gave the best results; {'n\_estimators': 35, 'max\_depth': 5, 'learning\_rate': 0.115}