```
### Rant:

Model accuracy is 88.89% but when we look at the confusion matrix we see that there are around 9K false predictions. 569 people are not eligible for loan but they will get the loan and it is likely going to be charged off.
```

Comparing Models Prerformance¶

In [216]:

```
ml_models = {
    'Random Forest': rf_Model,
    'XGBoost': xgb_Model,
    'Deep Learning': model
}

for model in ml_models:
    print(f"{model.upper():{30}} roc_auc_score: {roc_auc_score(y_test, ml_models[model].predict(X_test)):.3f}")
```

```
RANDOM FOREST                  roc_auc_score: 0.642
XGBOOST                        roc_auc_score: 0.733
DEEP LEARNING                  roc_auc_score: 0.904
```

Rant

When we look at the Roc scores, it is obvious that Deep Learning gives the best results and I am highly disappointed on random forest algorithm even thought I have used tuning on random forest and xgboost algorithms

In conclusion, deep learning has potential to solve that kind of problems and I believe credit scores for each customers would be a great addition to the dataset.

In [ ]:

```

```