**Conclusion:**

The HCDR project's goal is to forecast the repayment capacity of the affected population. This is a significant project because both the lender and the borrower require well-established projections. Because the data includes people's lives, HomeCredit will require the highest level of precision to ensure that it is forecasted accurately.

We did Exploratory Data Analysis in phase one, where we discovered several insights into the data and learned a lot about how to extract significant information from it.

Following that, we built a baseline model with pipelines and Logistic Regression, learning how to build models, train them, and test them using various metrics. In Phase 3, we finished feature engineering and learned how to design significant features to improve the model. Then we used GridSearchCV to perform Hyperparameter tuning, which taught us how to improve accuracy by combining multiple models. In Phase 4, we created an MLP model and tested it with AUC ROC score, but we did not get the anticipated AUC ROC score by training the dataset with the neural network by the comparison made from the kaggle submissions we can see our neural networks AUC ROC score is slightly less than Logistic Regression AUC ROC score.