**1. A short note on how you came into data science and your data science journey :**

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I first came in touch with Machine Learning when one of my friend was doing the Titanic Survival Challenge and was amazed that I could predict the survival of a person in a natural disaster? Due to the curiosity I started the competition as well. And by the time I ended that competition I was totally amazed by the power of Analytics and Machine Learning on today’s real world problems.

**2. Your approach to solving this particular problem of the hackathon :**

1. Rules made

2. Feature Engineering

3. Catboost modelling

This challenge was one on a kind with a very small dataset.

On EDA I found that they’re were some rules for which the records could be directly classified as 1 (target). I found 5 rules which almost covered 48% of the data given to predict.

All Rules :

1. Internal\_Audit\_Score >= 9 ==> Target = 1

2. External\_Audit\_Score >= 9 ==> Target = 1

3. Final\_Score >= 9 ==> Target = 1

4. Loss\_score >= 9 ==> Target = 1

5. Past\_Results >= 2 ==> Target = 1

Next I made some features based on numerative operators like addition of scores, subtraction, multiplication and choosed 3 best features which boosted my Local CV a little bit.

I baselined almost all models for which gradient boosting methods worked great, especially CatBoost. I ended up using CatBoost for my final model which worked a tad bit better on local than every other model.

**3. Your overall experience on MachineHack :**

MachineHack is a great platform for anybody practising Data-Science and Machine Learning as you can compete with anybody starting from a student till a Data Scientist with 10 years of experience and learn tremendously in parallel to competing with the best.