Assignment 1 :-

High Risk vs Low Risk Applicants.

A credit score is based on an individual borrower's credit history, that is, the number of credit accounts, total debt, repayment history and enquiries he/she has made while seeking a loan. Using the credit score, a lender evaluates the probability of the borrower repaying debts/loans on time.

While a high score increases your chances of getting credit (like a loan or credit card) and that too at attractive interest rates, a lower score can make lenders wary of lending to you.

So, based on the given past record data of a bank granting its customers the loan in terms of their credibility, where every individual is categorised as either a 'High Risk Applicant' or a 'Low Risk applicant'.

('High Risk Applicant'=1 & 'Low Risk applicant'=0).

My Analysis Report:

So, based on my analysis over the given data, I came across these various insights:-

- More Males apply for loan than Females
- People with a maximum of 4 years of employment gets loan mostly.
- People with at least 1 years of employment gets loan mostly.
- Mostly Single people apply for loans compared to others.
- Banks mostly prefer Skilled and employed people for granting loans.
- Mostly people take loans to buy Electronic Equipment.

These are some characteristics of a High Risk Applicants:

- Younger applicants (<35 yrs old) are more likely to become a high risk applicant, compared to the Older applicants (>35 yrs old).
- People who take loans for 24 months (atleast), generally fall under the category of a high risk applicant.
- Single people are most likely to become a high risk applicant.
- People who have at least one existing loan in the bank are most likely to become a highly risk applicant.

Observation by using Machine Learning Algorithms in the given Data

- The given Data is around 73% accurate. Which means it can classify the applicants on the basis of their credibility at ~73% accuracy.
- There are 14 Numerical columns and 11 Categorical columns in the given data.
- The Principle amount column is left screwed and has around 40% of outliers present in it.

Conclusion

The above analysis might be crucial for the bank, Although the given Data is ~73% accurate which might not give accurate predictions every time.