**Ref. No. MES IMCC / 198/ 2024 – 25 Date:27/12/2024**

**CERTIFICATE**

This is to certify that the Project entitled **“Loan Check**“ is completed by **“Pratyush Prakash Majumdar**” of M.C.A. Semester I for the Academic Year 2024-25 at MES’ Institute of Management & Career Courses (IMCC), Pune - 411038.

To the best of our knowledge, this is an original study done by the said student and important sources used by him/her have been duly acknowledged in this report.

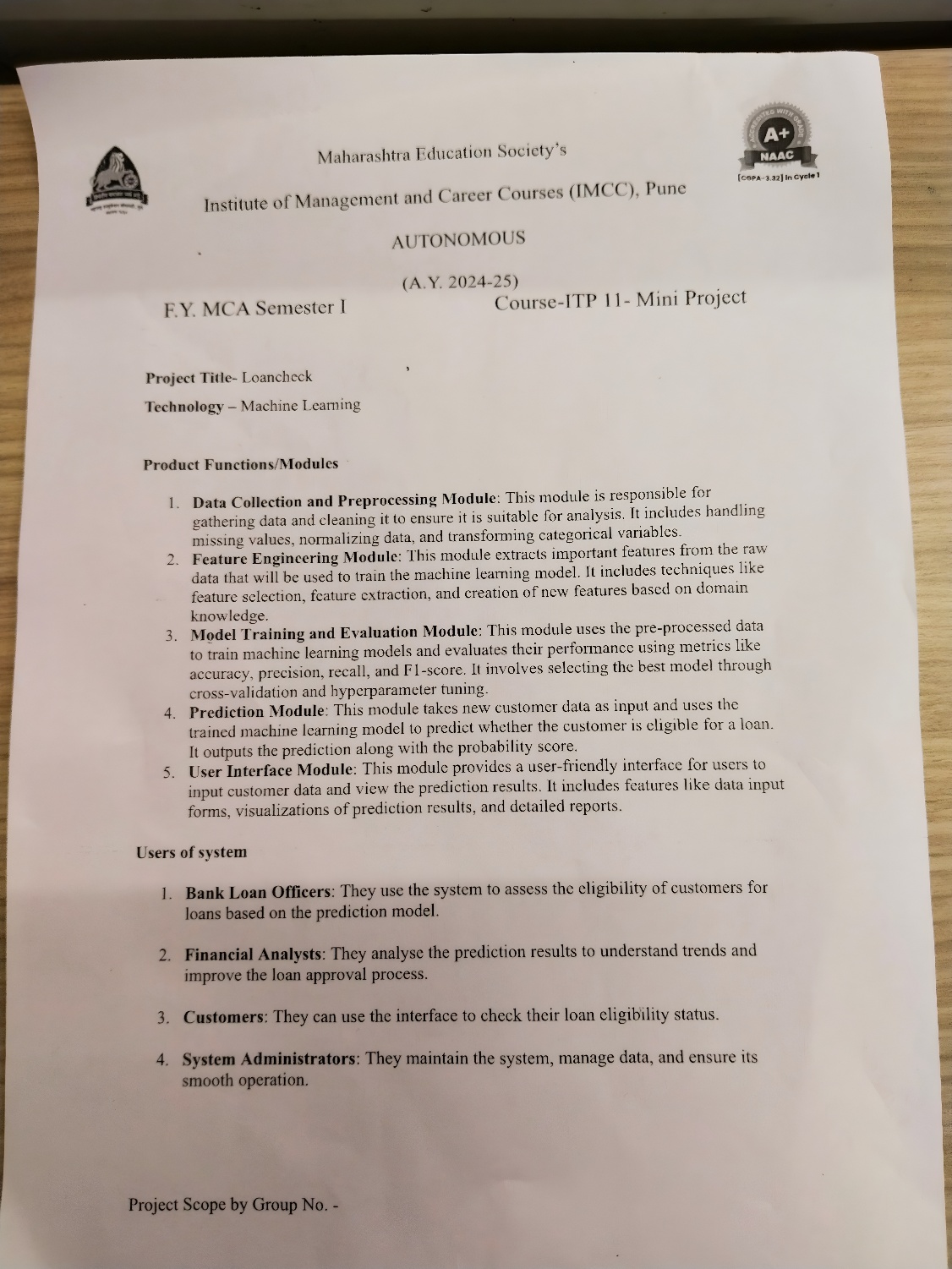
The report is submitted as a part of course ITP11 Mini Project for the Academic Year 2024-25 as per the rules and guidelines prescribed by the institute.

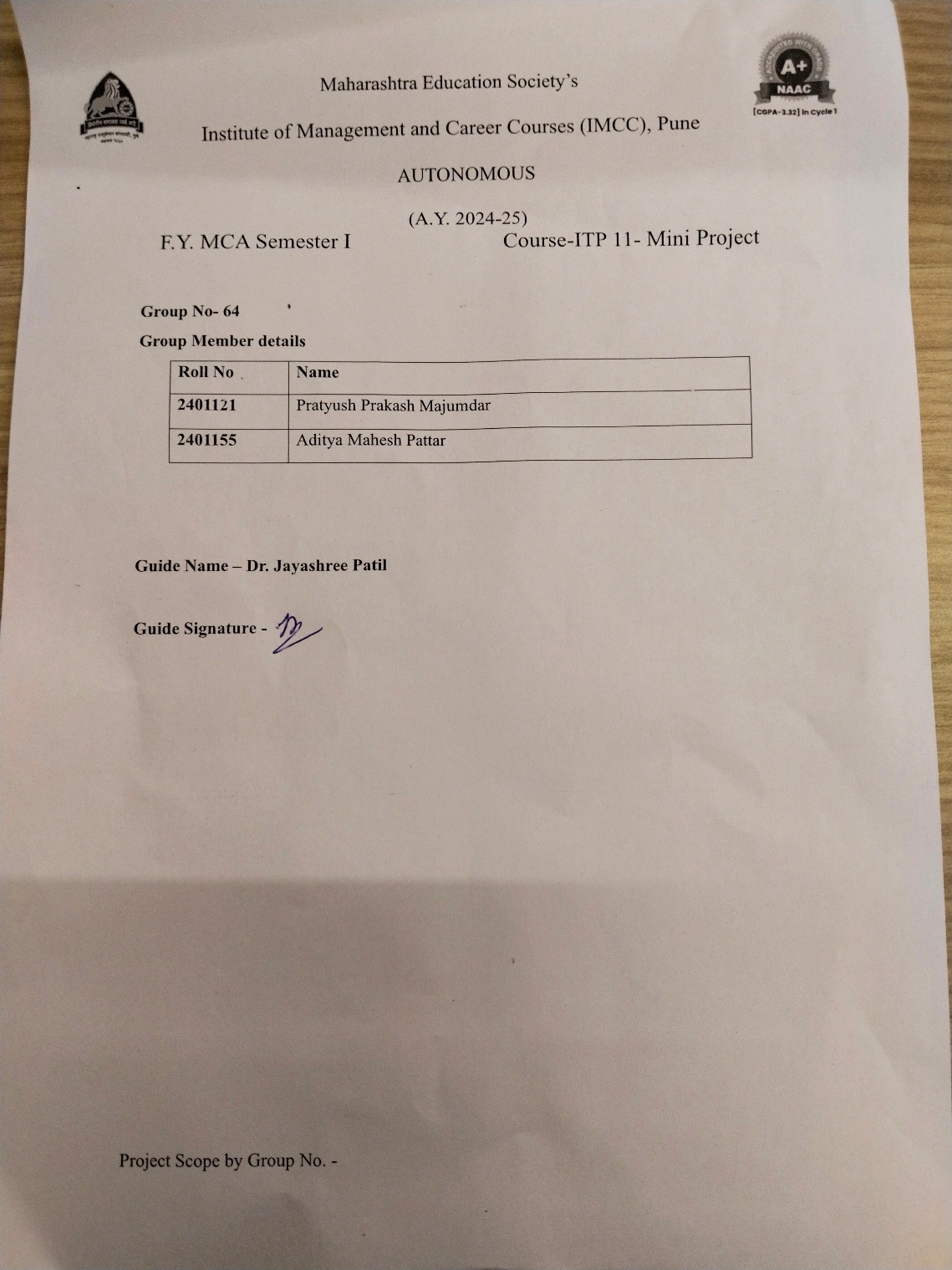
  

Ms. Kalpana Dhende Ms. Manasi Shirurkar Dr. Ravikant Zirmite

Project Coordinator Program Coordinator Head, Dept. Of MCA

**Synopsis**

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**Use Case Diagram**

Input from user

Classification model

Train data

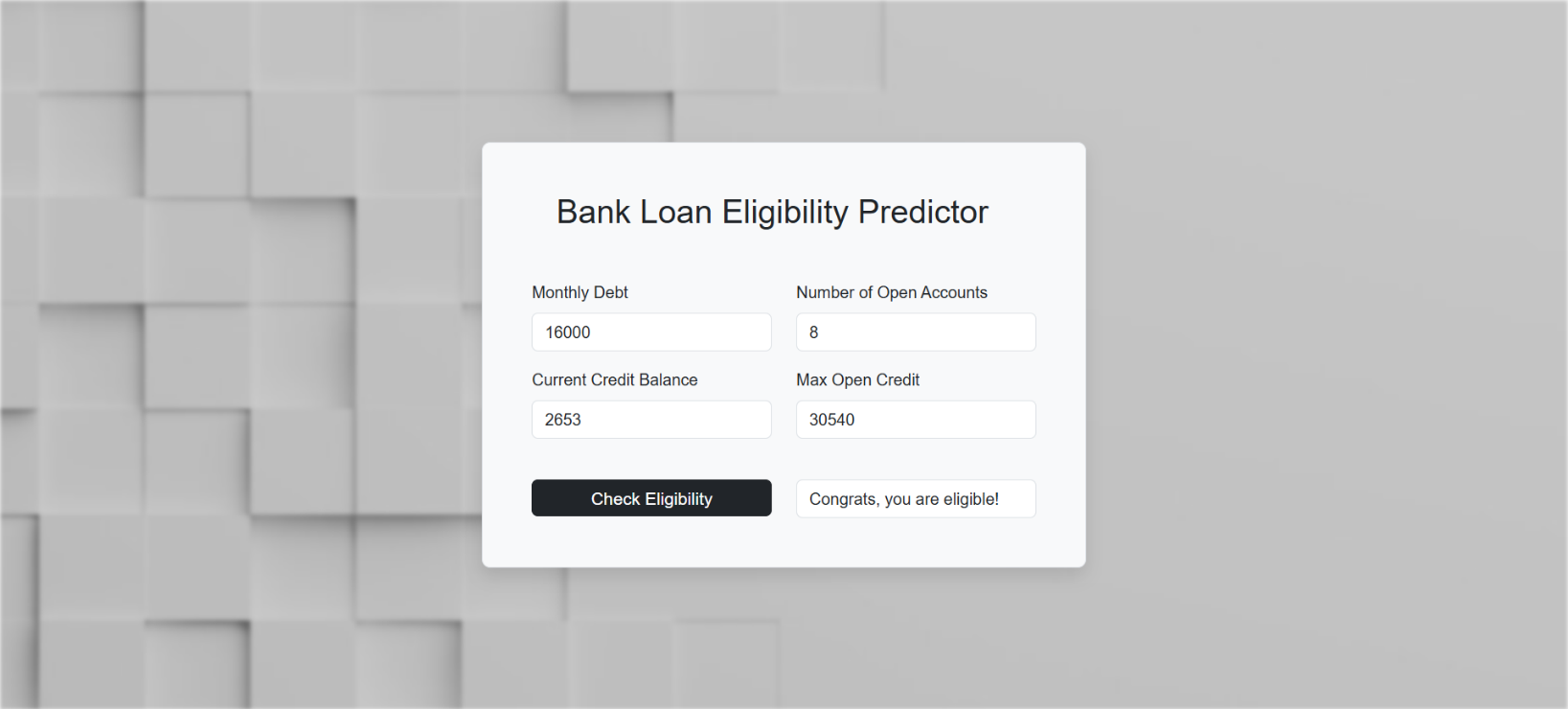
Test data

Apply ML algorithm

Flask output

**Snapshots**

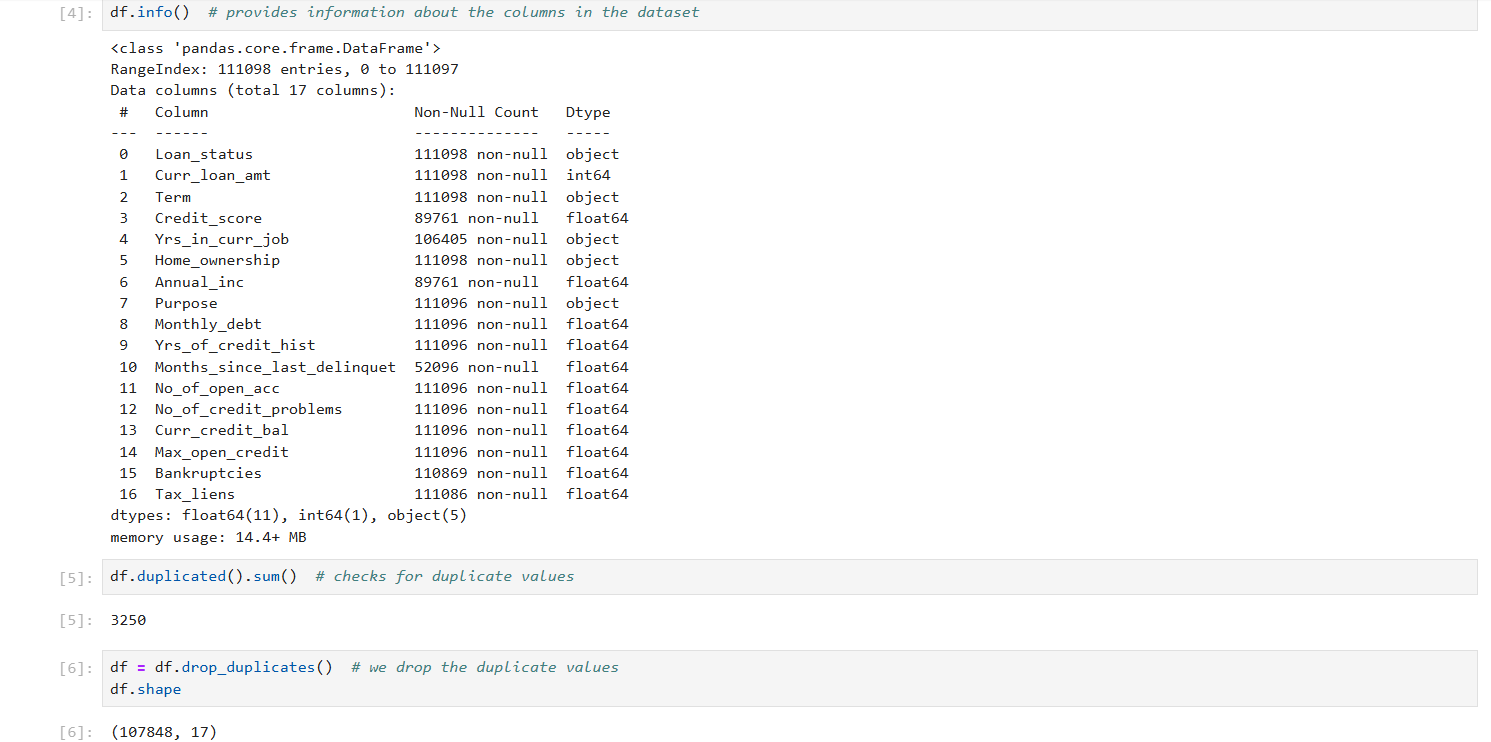
1. Prediction Page



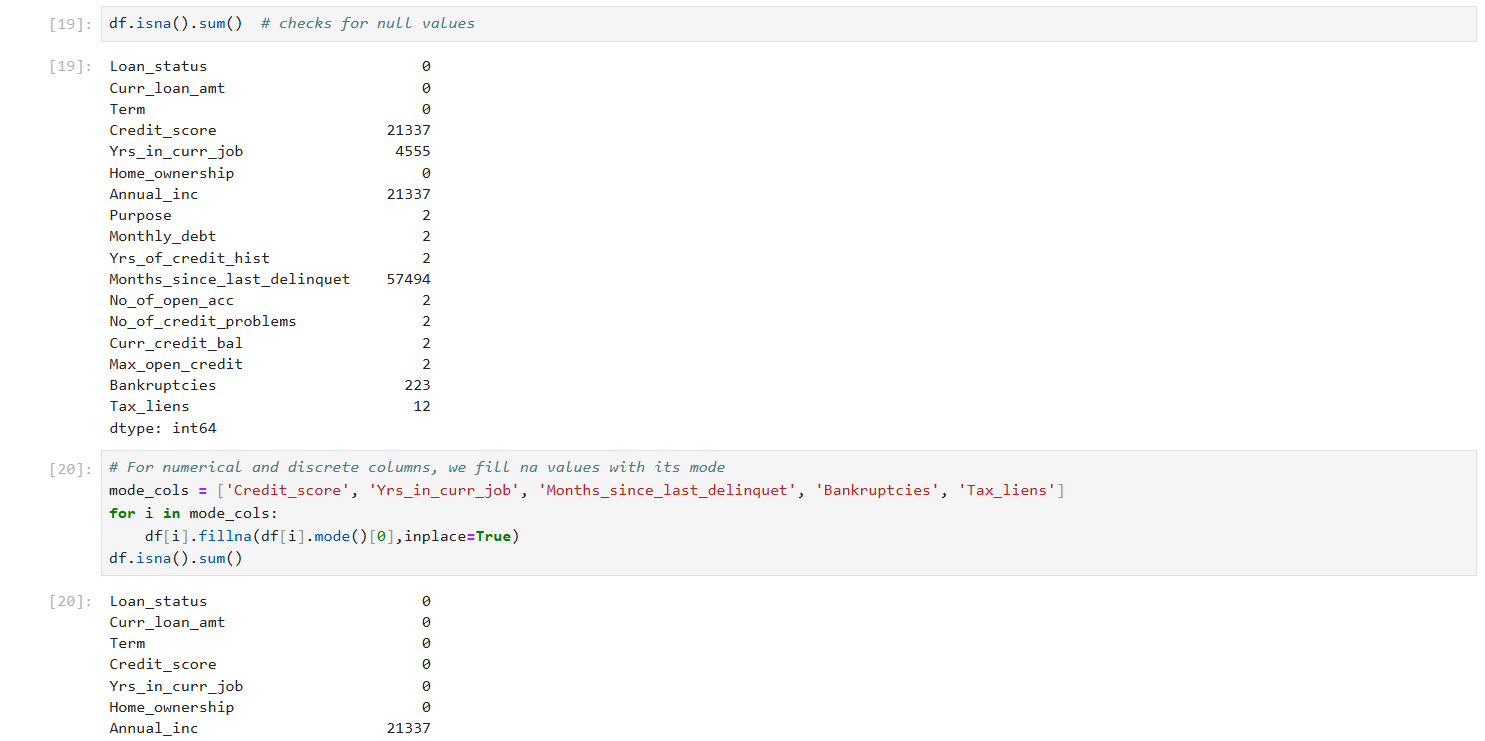
1. Import libraries and read the dataset

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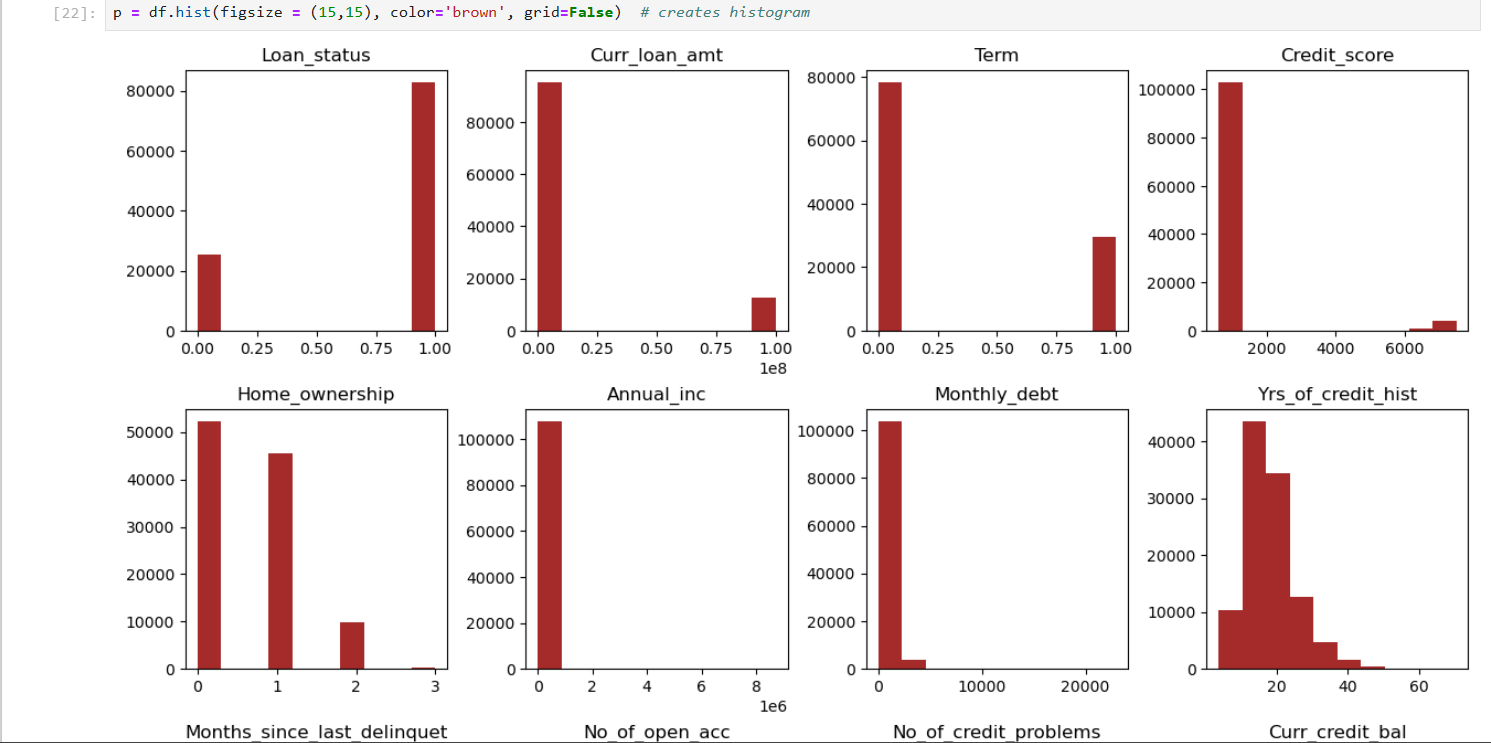
3) Check info and duplicate values

****

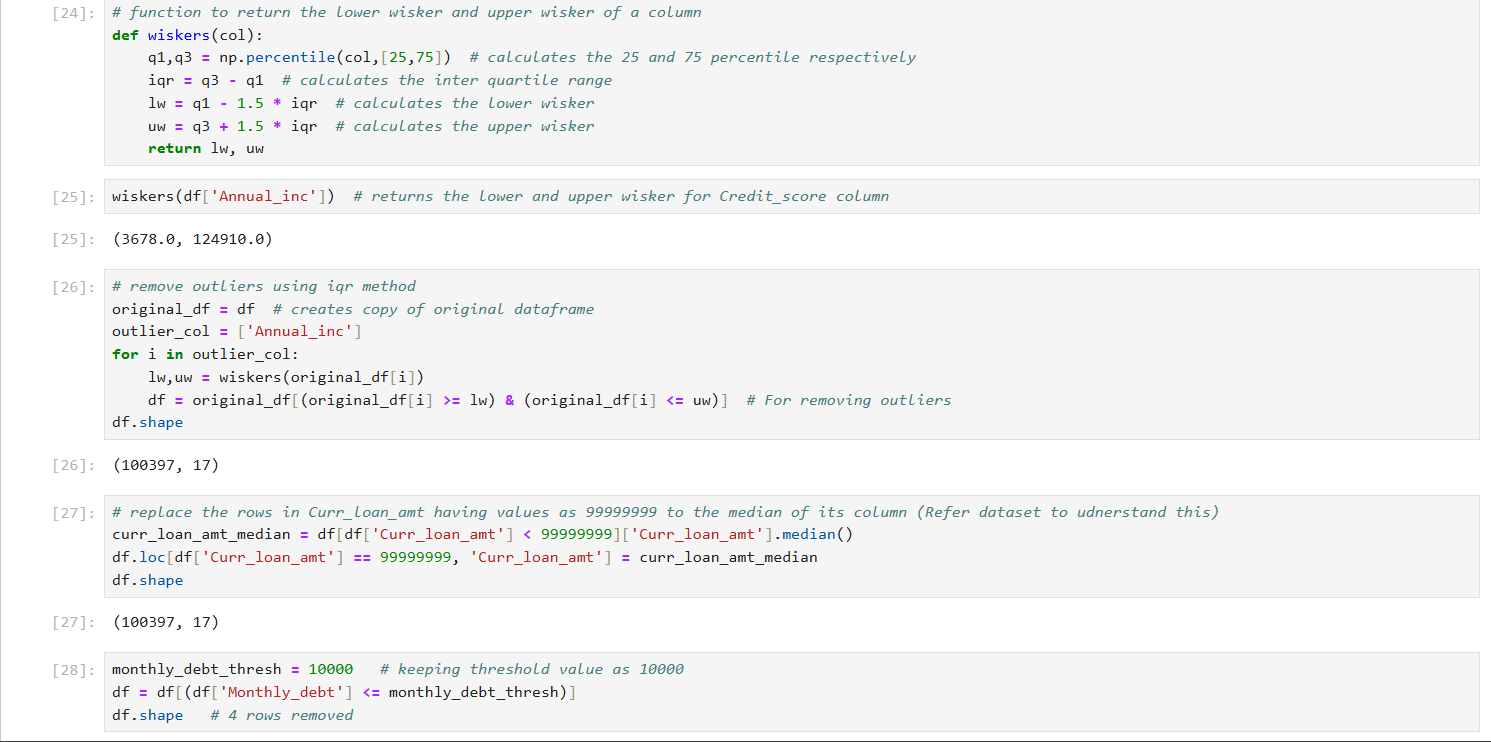
4) Check and replace null values

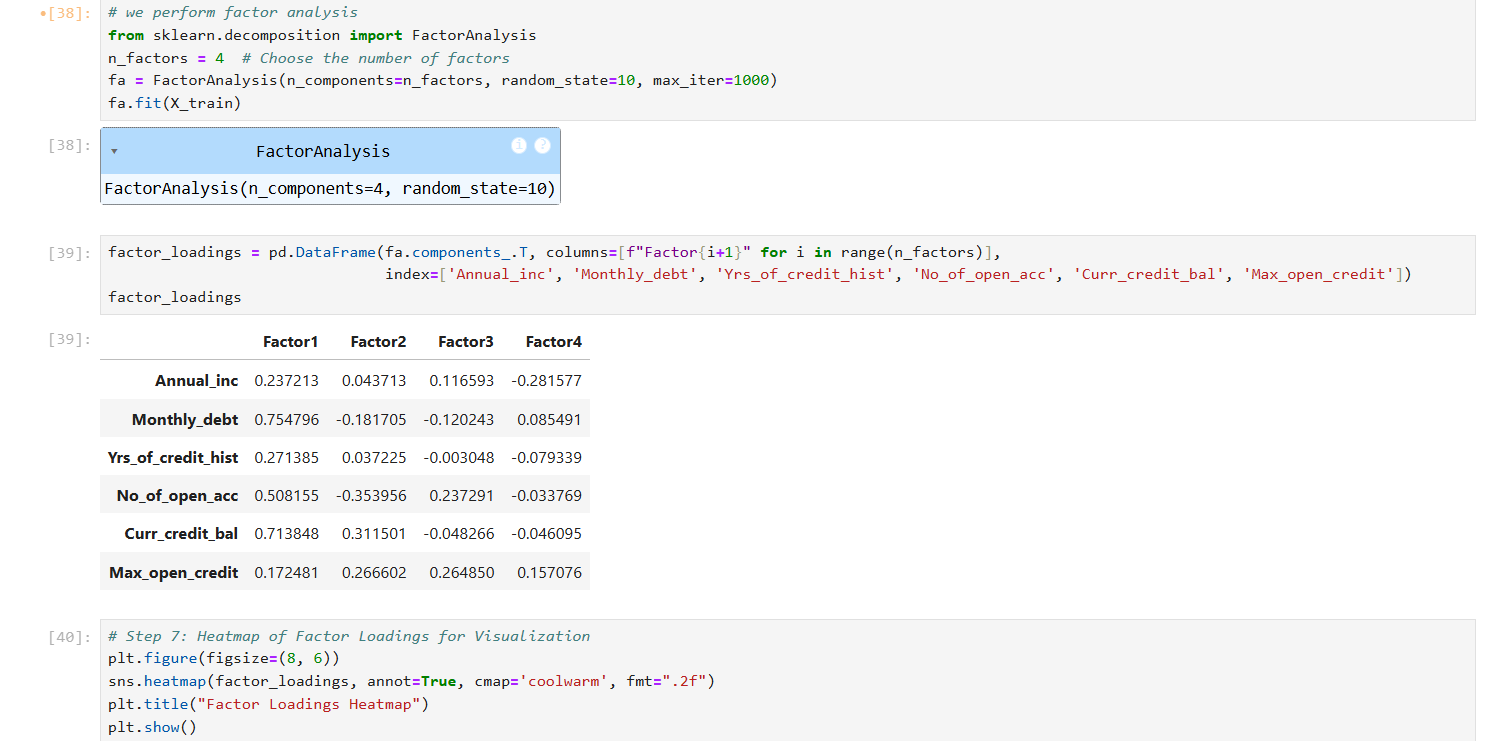
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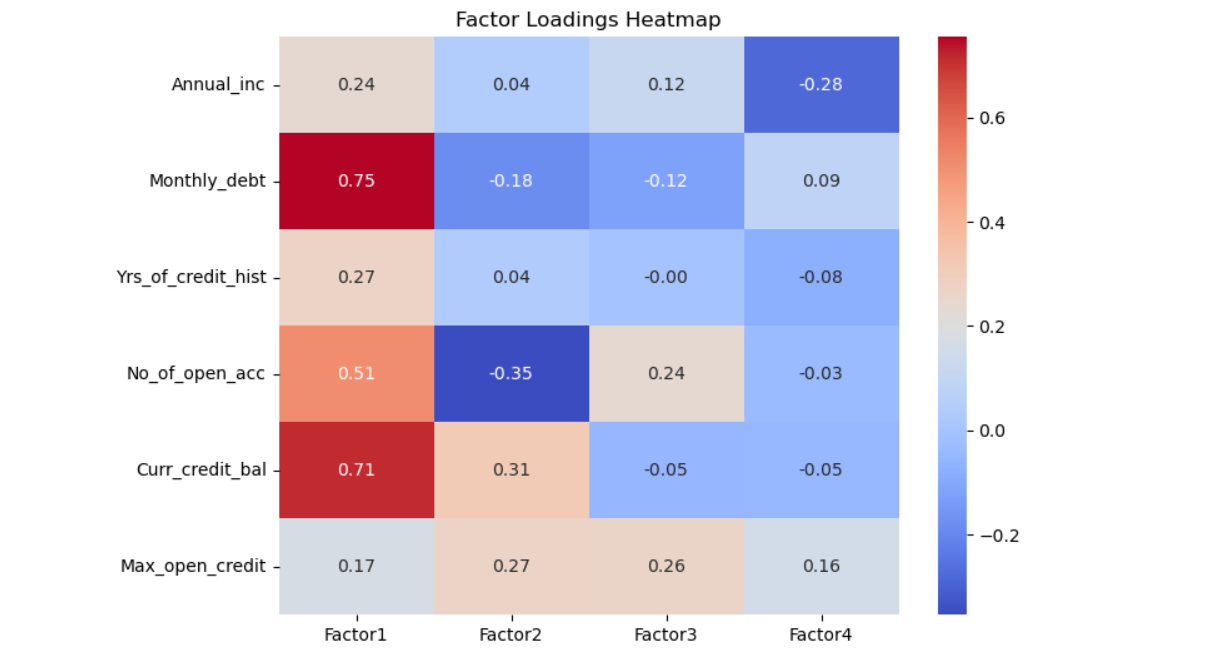
1. Create histograms to check skewness of data

****

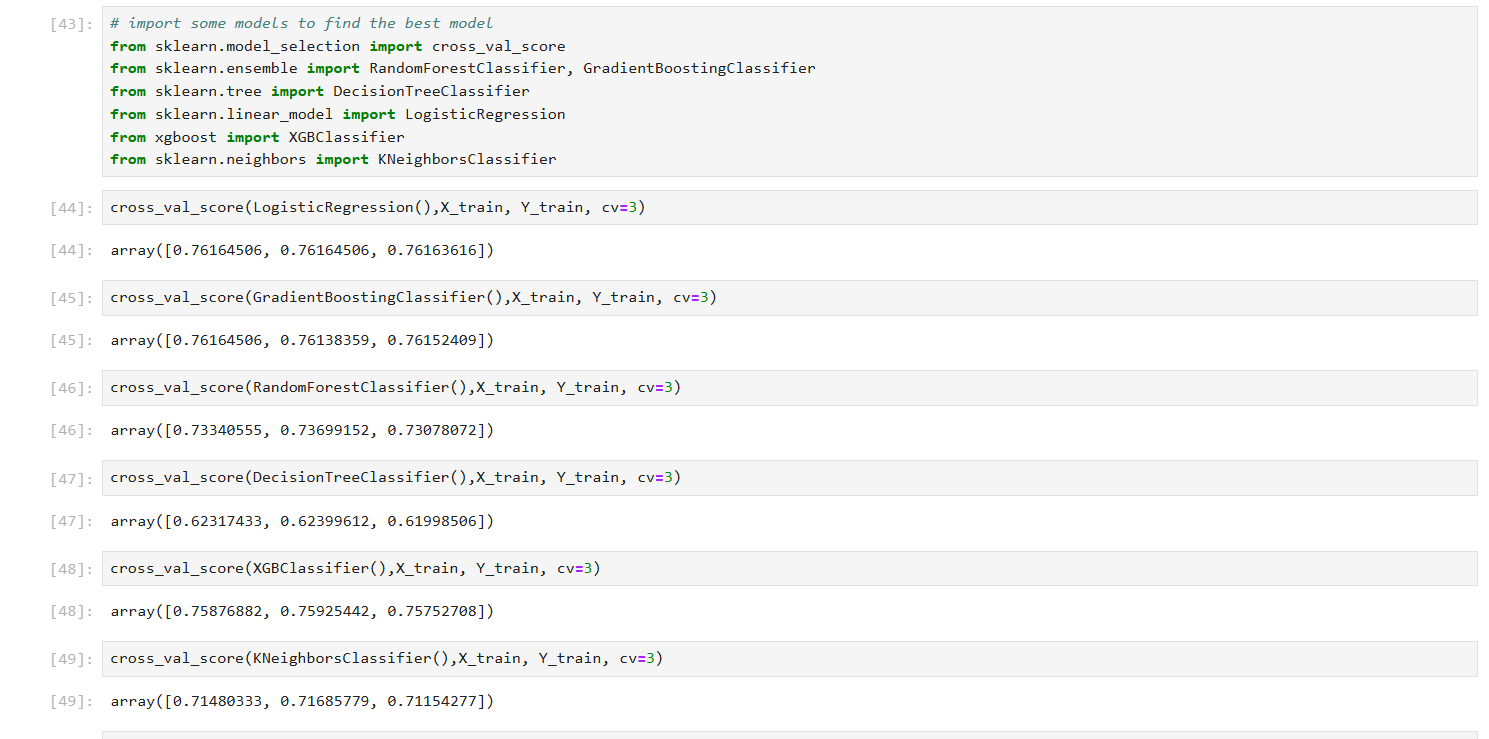
1. Check and handle outliers

****

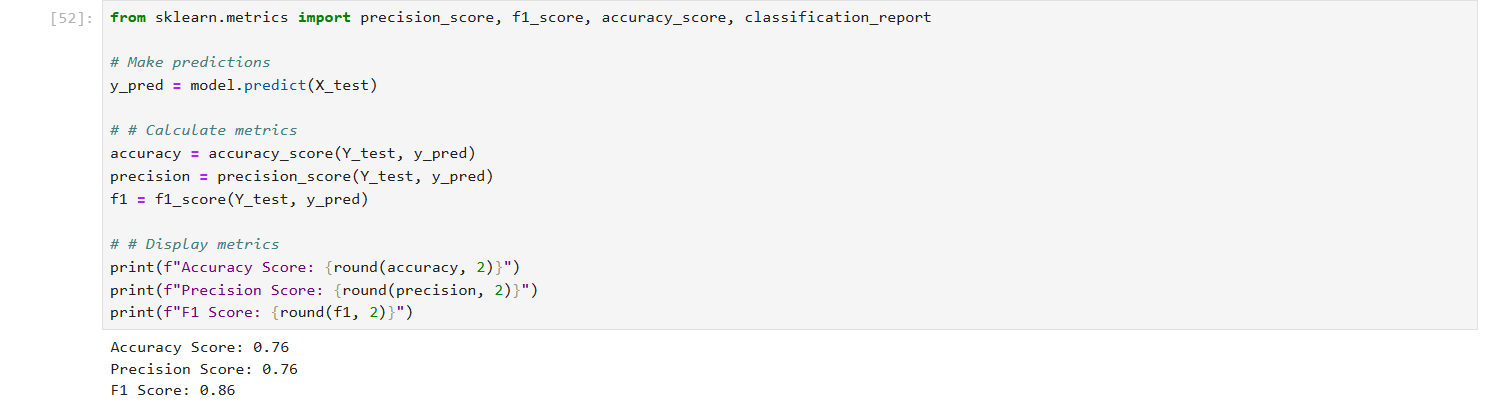
1. ****Perform factor analysis to find potential factors
2. Heatmap to display the factor loadings

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9) Find the best model for prediction

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10) Calculate metrics.

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11) Store predictions in excel and pickle file

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