# Data Science Project Training Report

**on**

## Machine Learning Domain Projects for Regression, Classification and Clustering using Various Datasets

#### **BACHELOR OF TECHNOLOGY**

**Session 2021-22**

**in**

###### **Computer Science**

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**AFFILIATED TO**

**DR. A.P.J. ABDUL KALAM TECHNICAL UNIVERSITY, U.P., LUCKNOW**

**(Formerly UPTU)**

Student’s Declaration

I / We hereby declare that the work being presented in this report entitled **“LOAN PREDICTION USING MACHINE LEARNING”** is an authentic record of my / our own work carried out under the supervision of **MS SAPNA JAIN, Assistant Professor, Computer Science**

**Date: 29/JUNE/2022**

**Signature of student.                               Signature of student: Radhika Gupta**

**Name: Dev Bhardwaj.                              Name: Radhika Gupta**

**Roll no.: 2000320120069.                        Roll no.: 2000320120129**

**Department: Computer Science.            Department: Computer Science**

This is to certify that the above statement made by the candidate(s) is correct to the best of my knowledge.

**Signature of HOD**                                         **Signature of Teacher**

**Prof. (Dr.) Pankaj Kumar Sharma** **Sapna Jain**

**Computer Science**                                               **Assistant Professor**

**Computer    Science**

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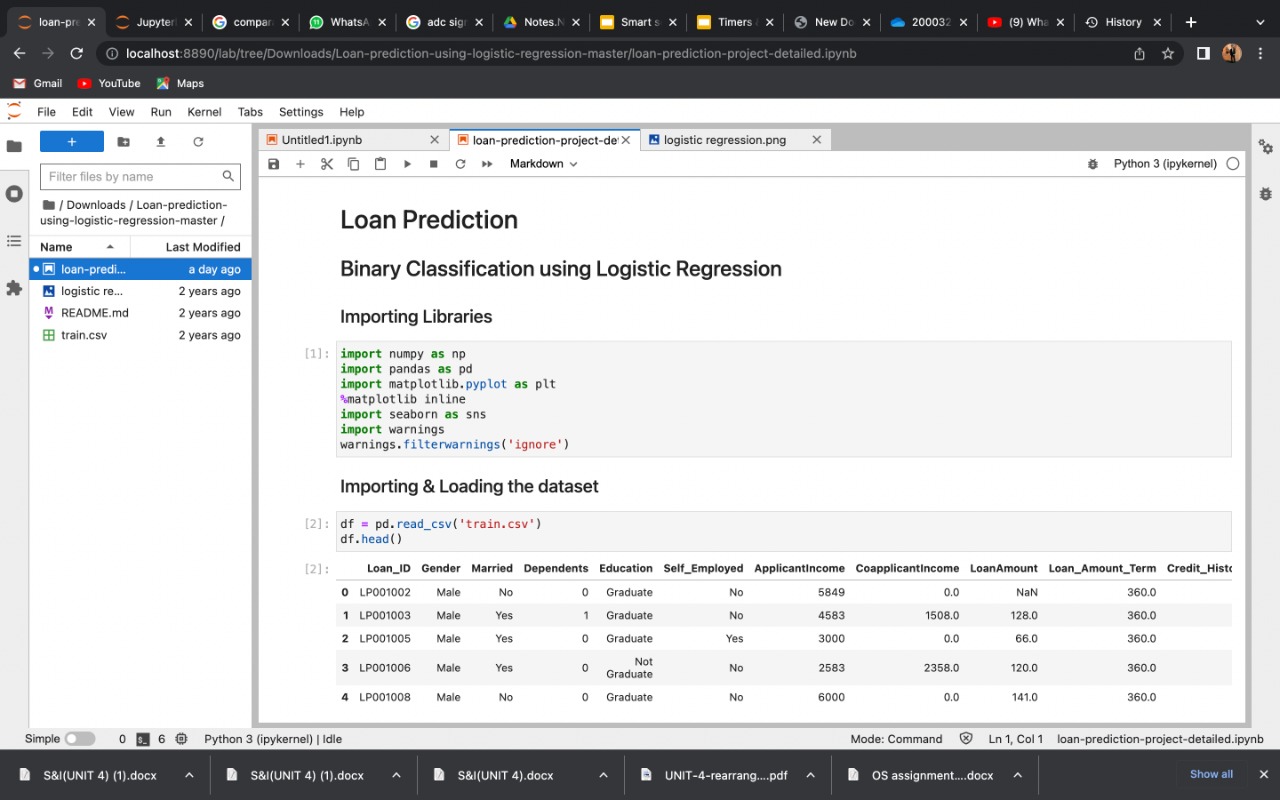
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Motivation

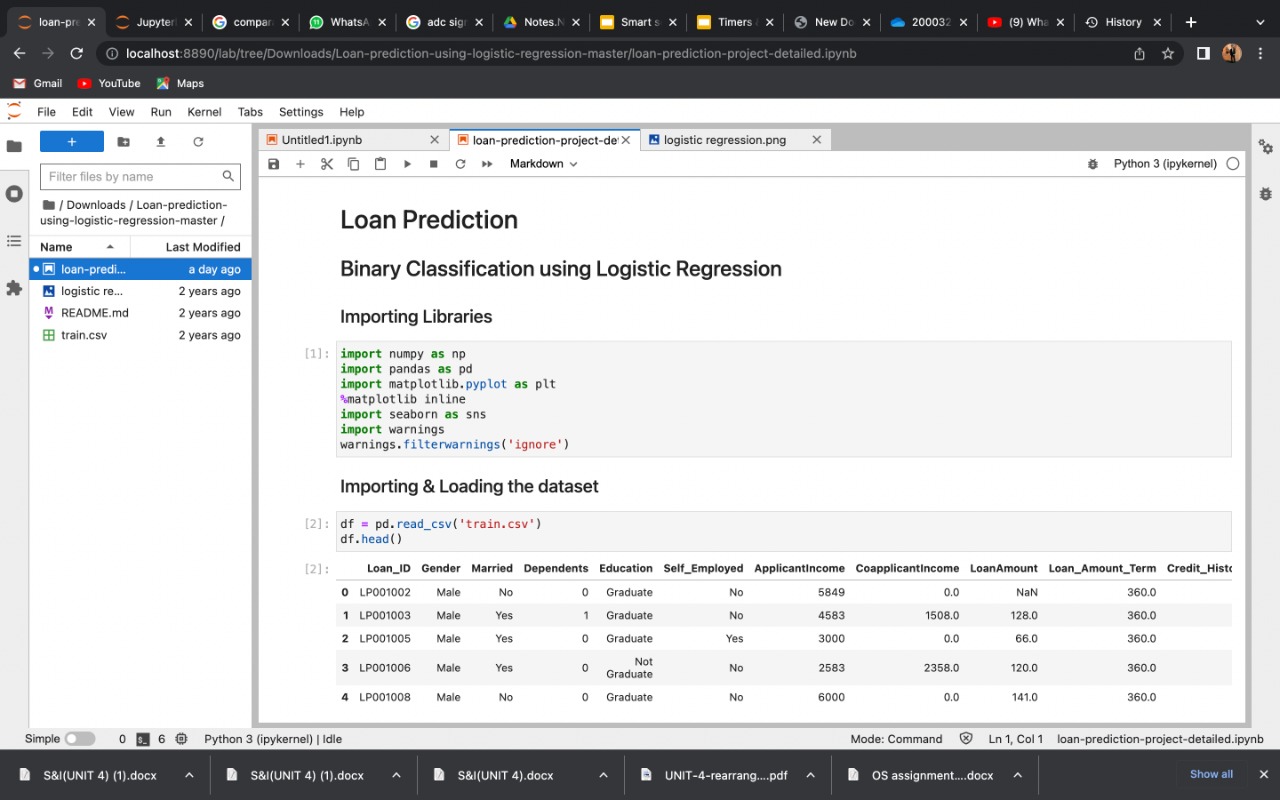
* This project was started as a motivation for learning Machine Learning Algorithms and to learn the different data preprocessing techniques such as Exploratory Data Analysis, Feature Engineering, Feature Selection, Feature Scaling and finally to build a machine learning model.
* In this project we will predicts loan accuracy.

**Project explanation and code**

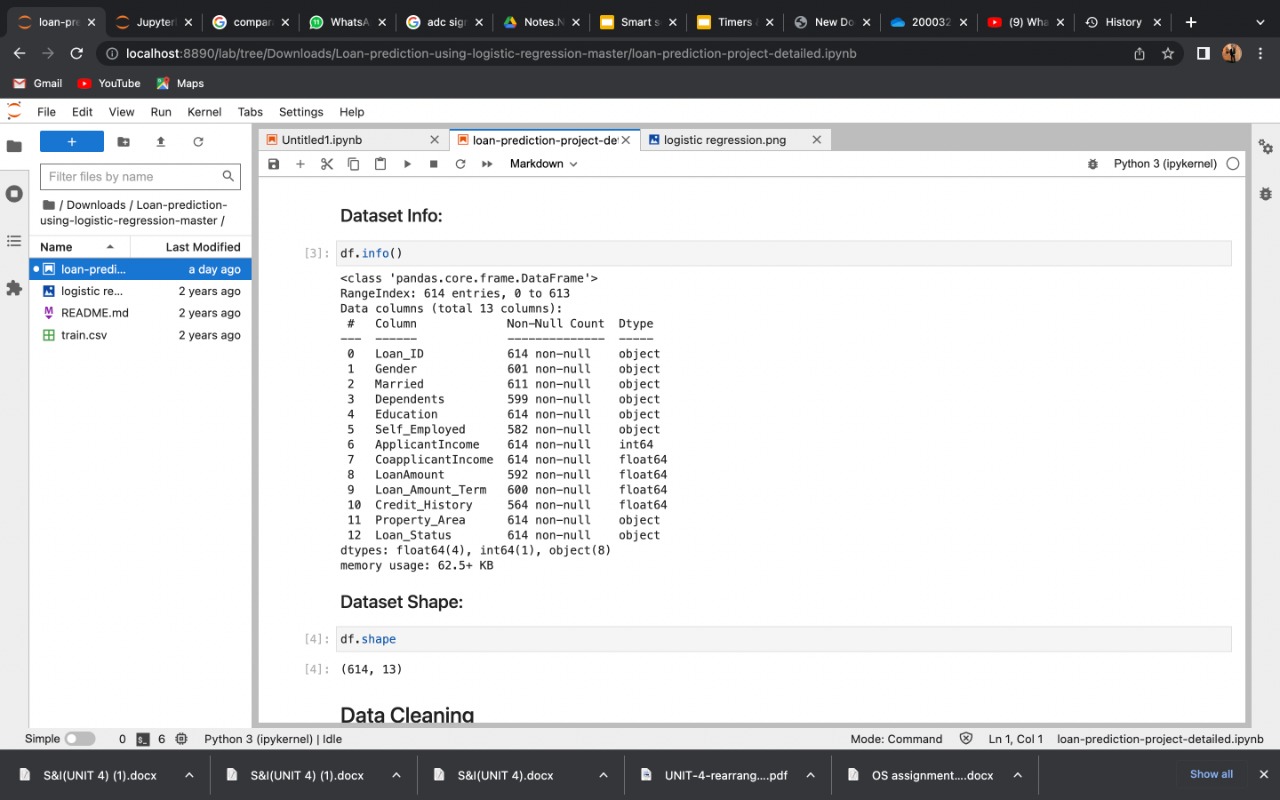
1. **Importing libraries**

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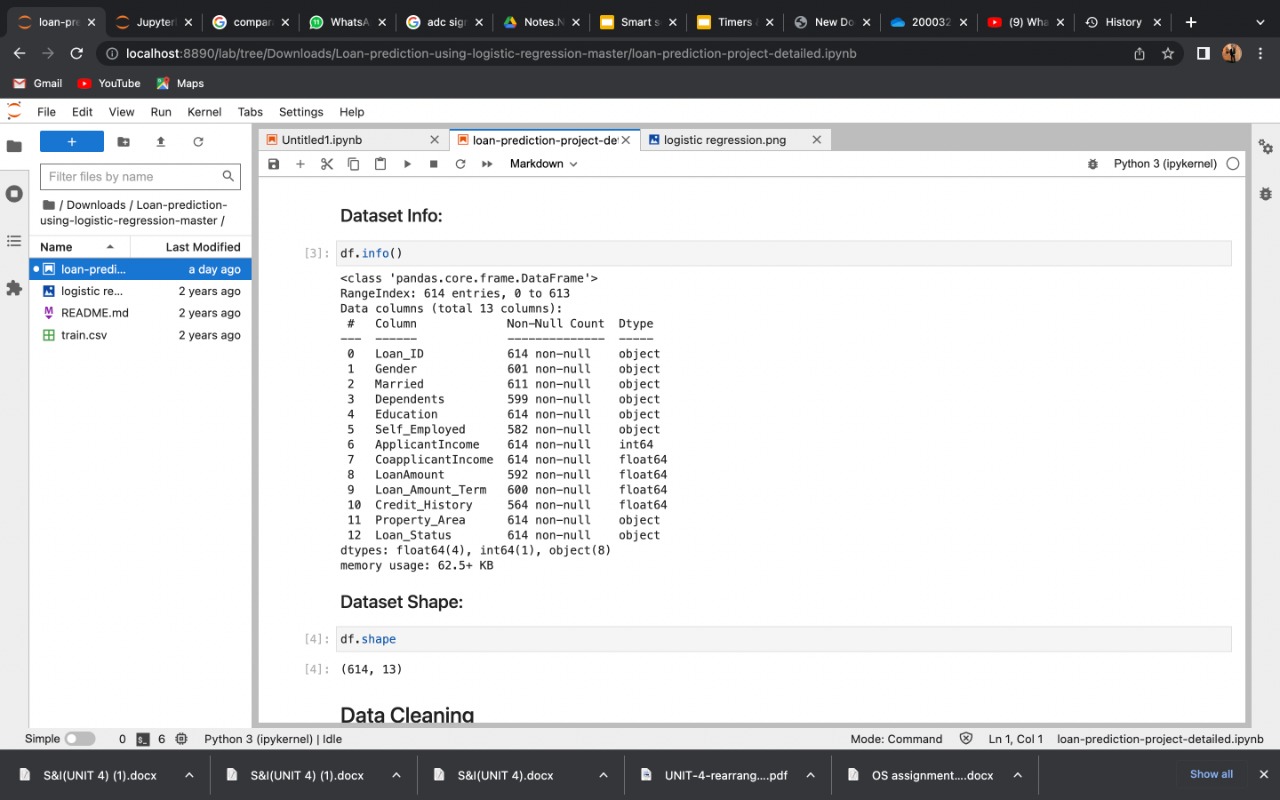
1. **Loading the data set to our file and previewing its 1st five rows.**

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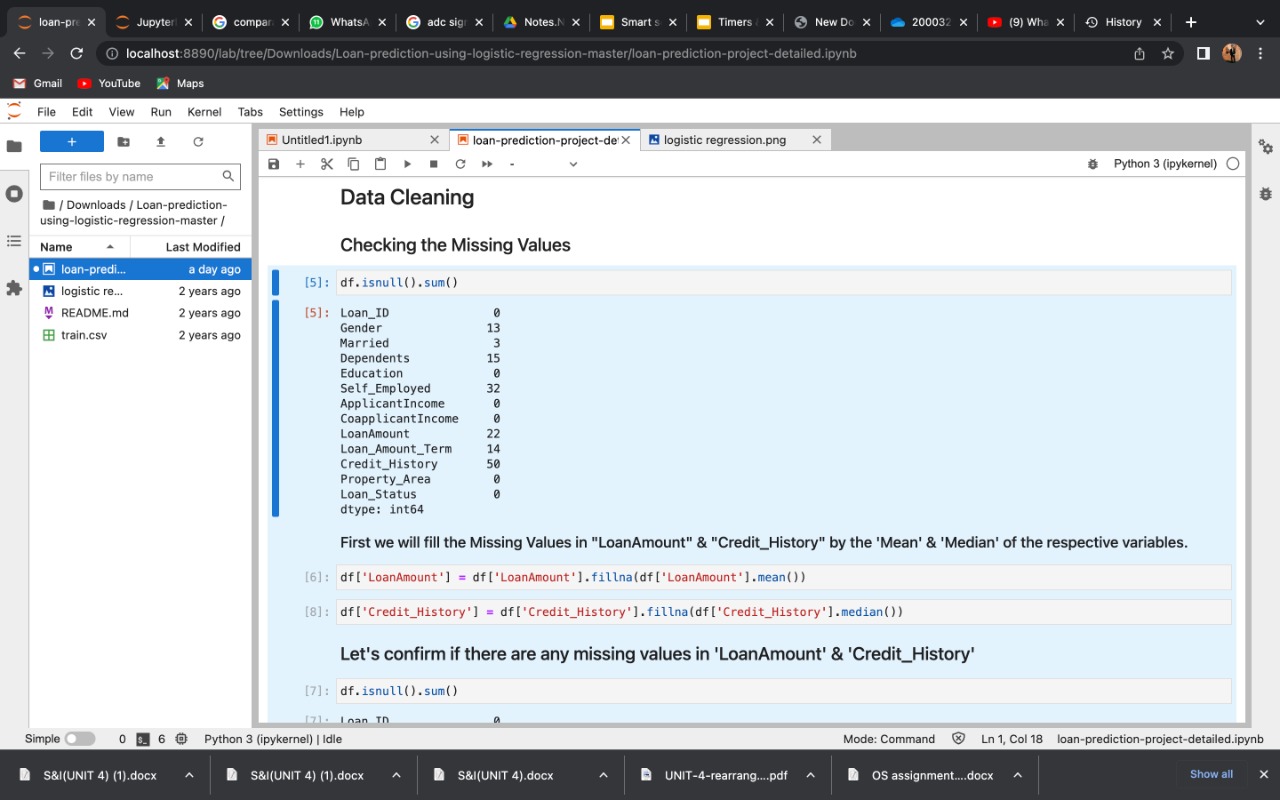
1. **Getting the information about our dataset**

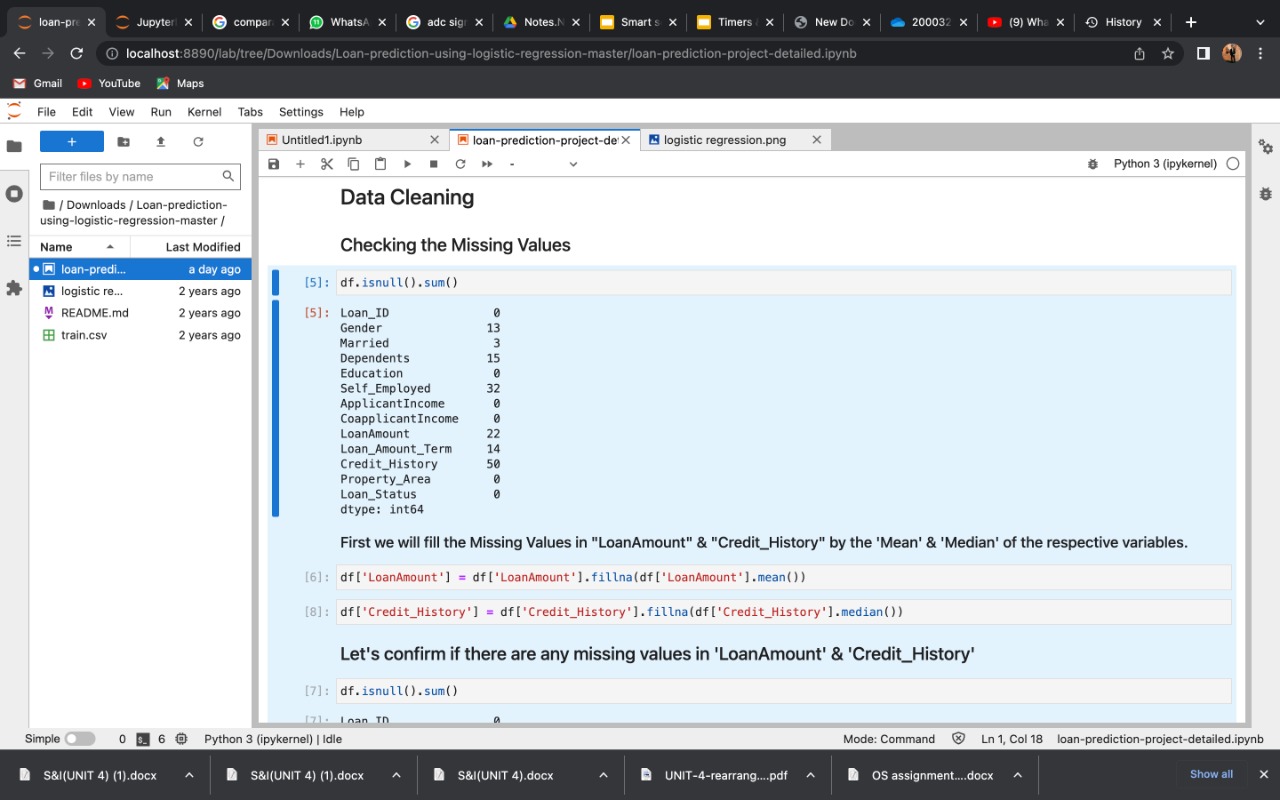
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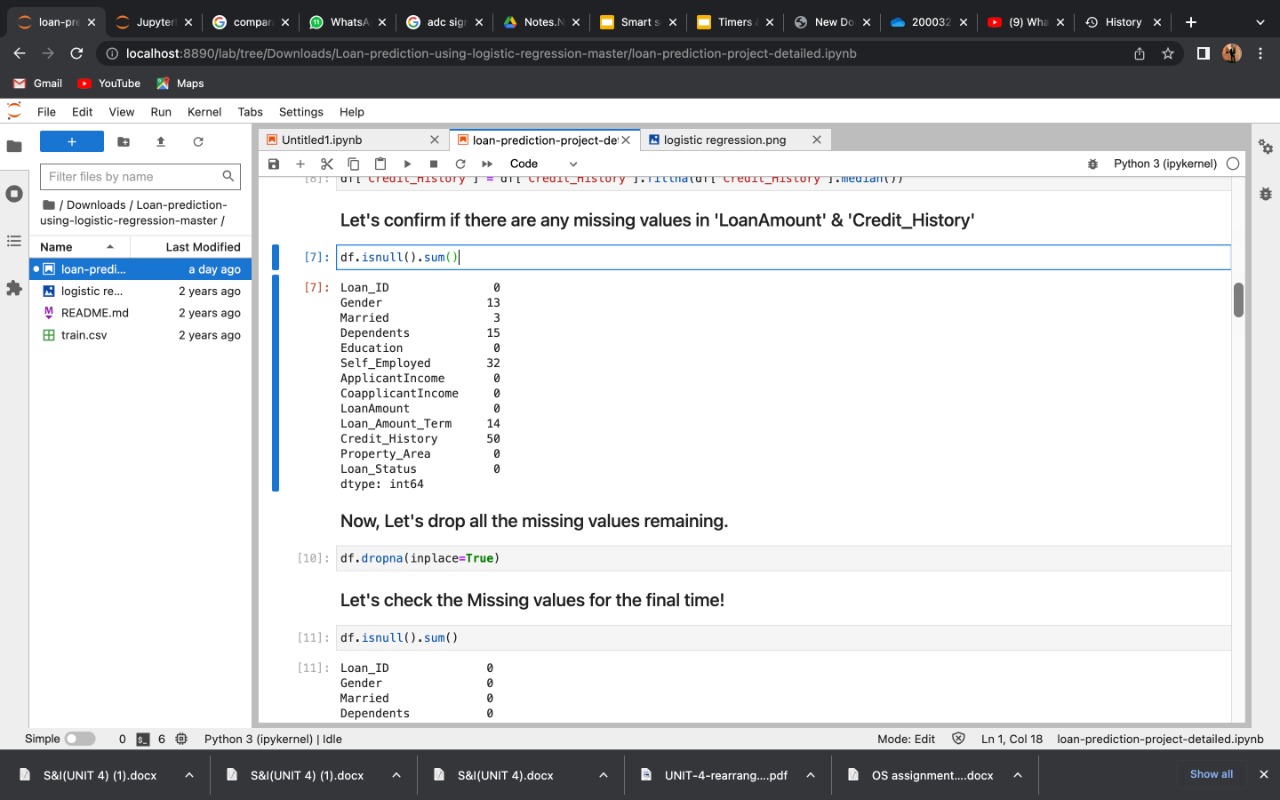
1. **Shape of our dataset.**

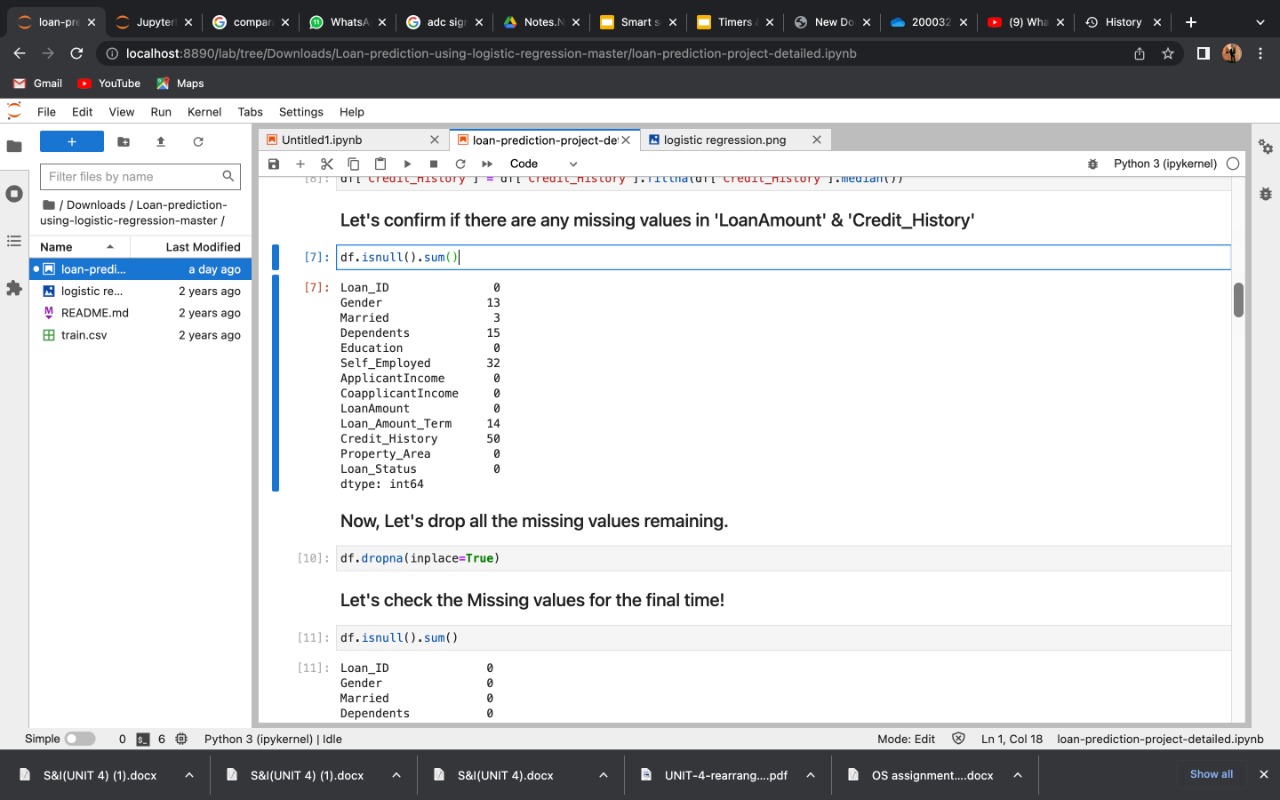
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1. **Checking the missing values**

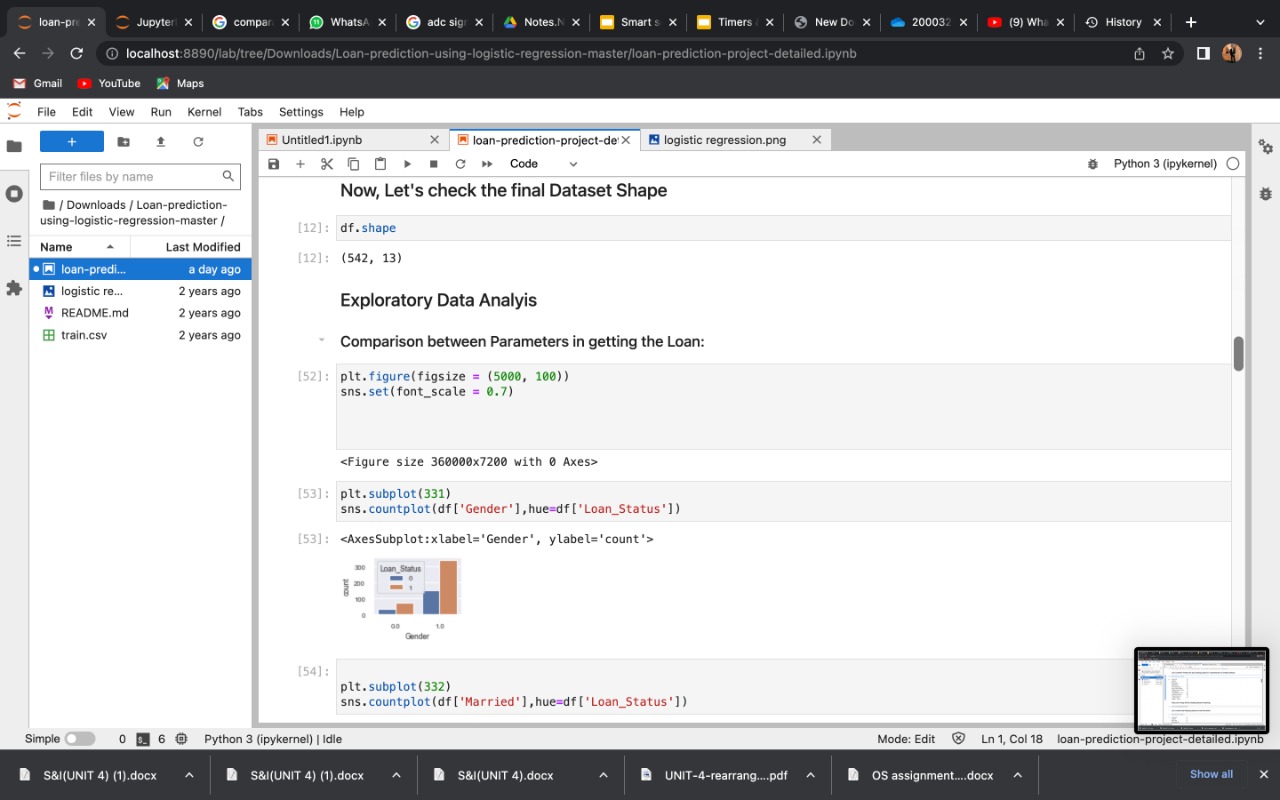
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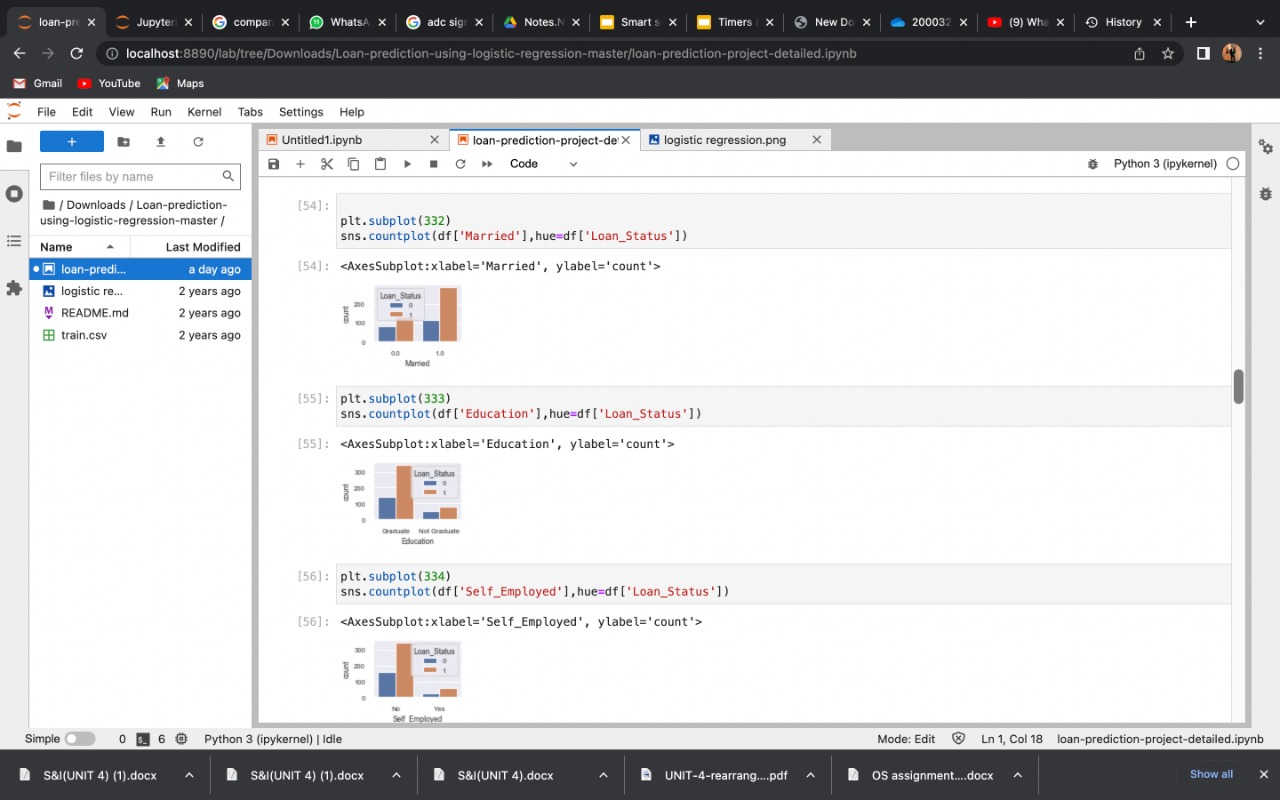
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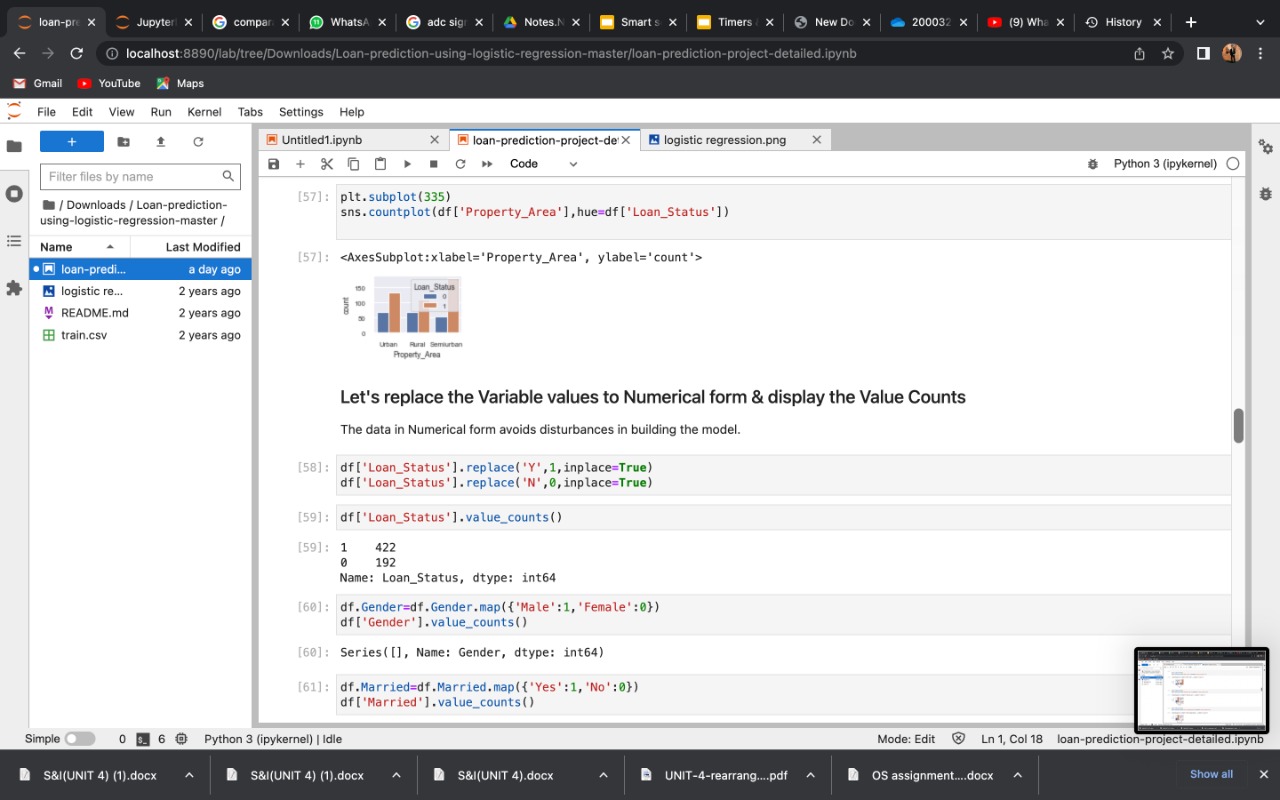
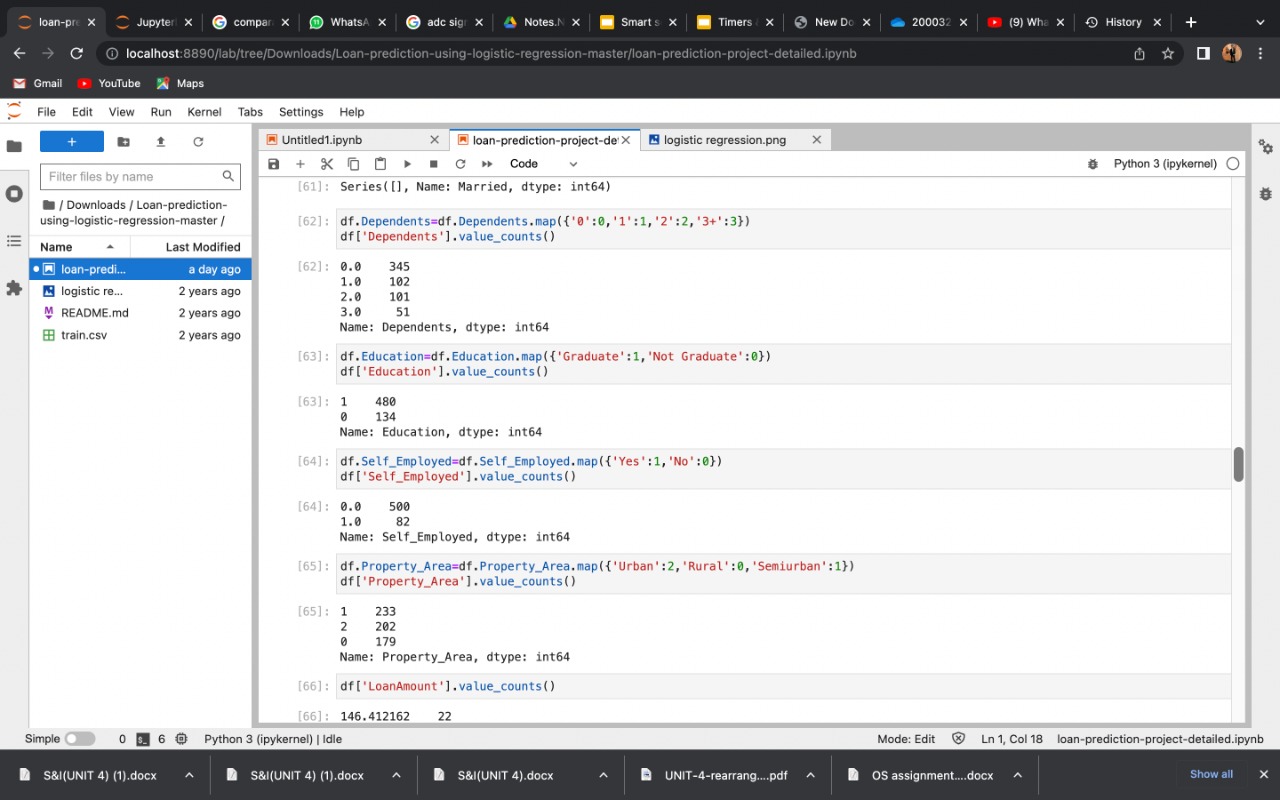
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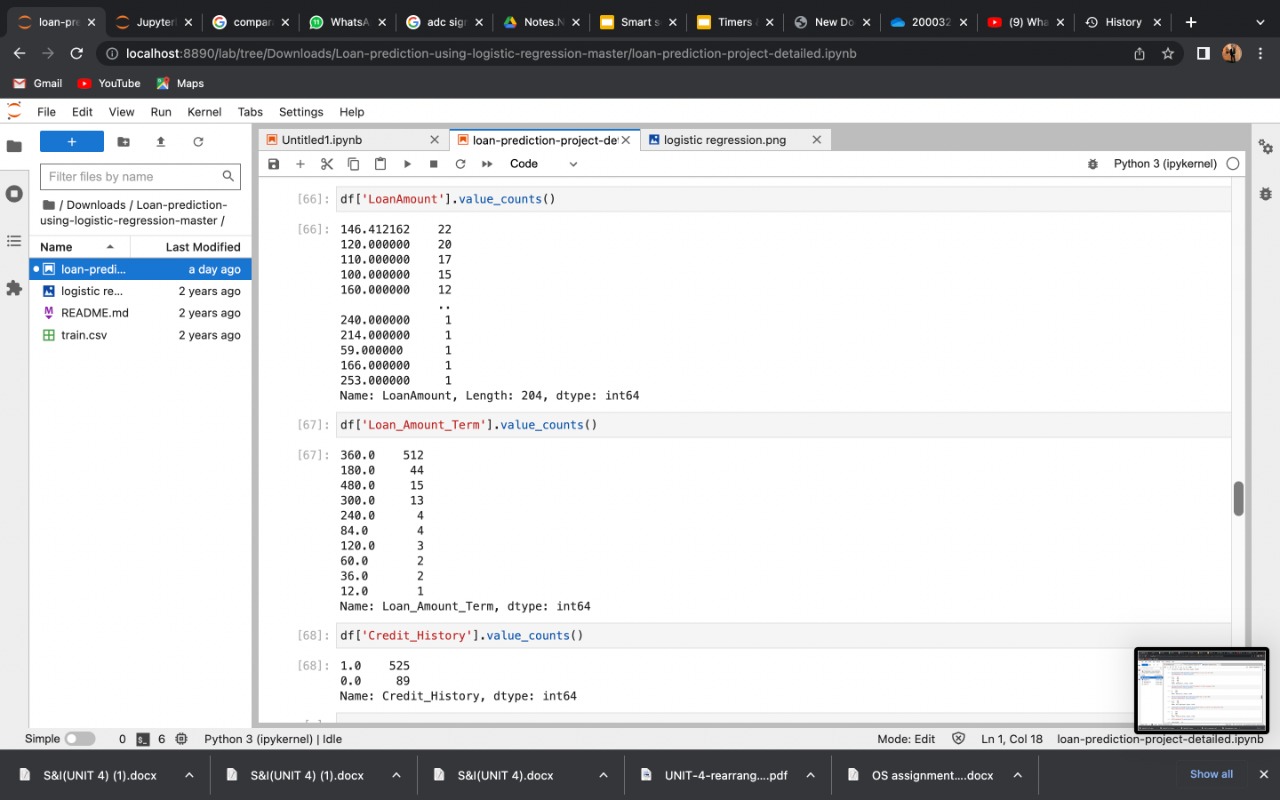
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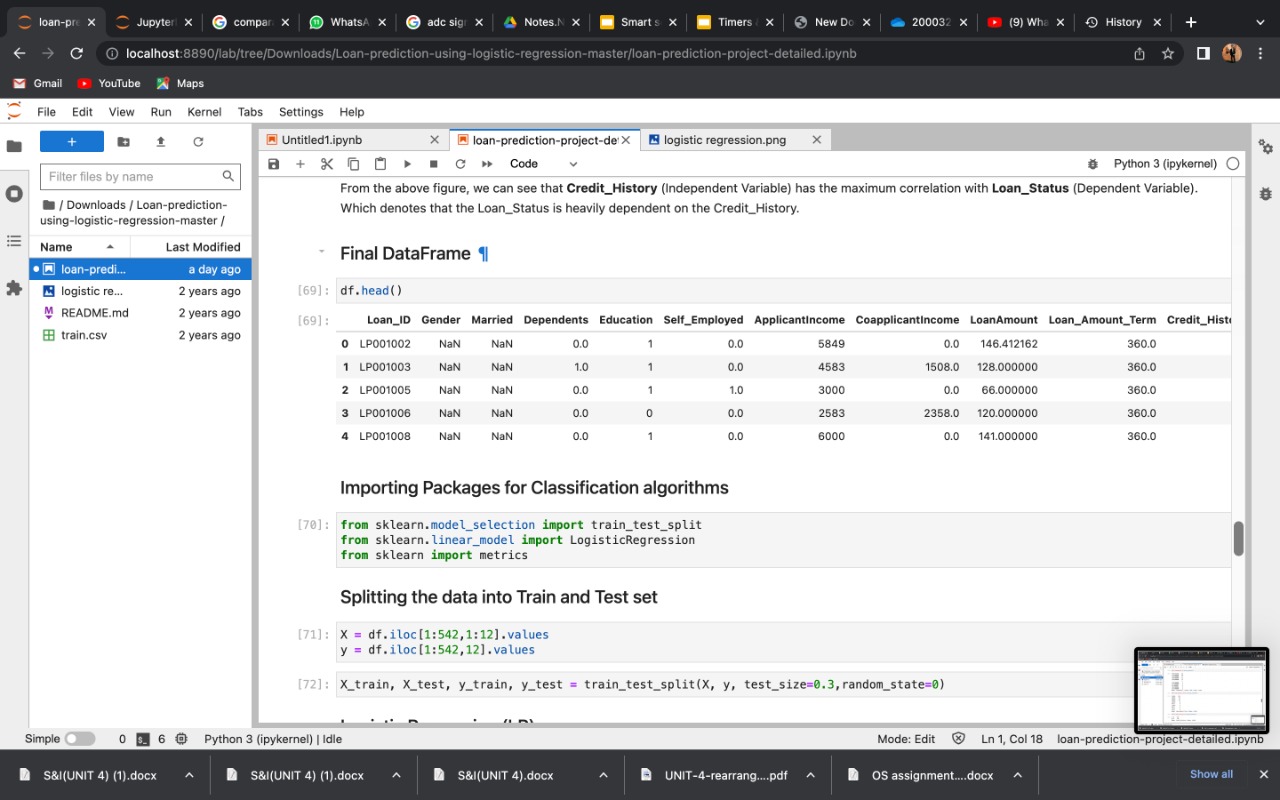
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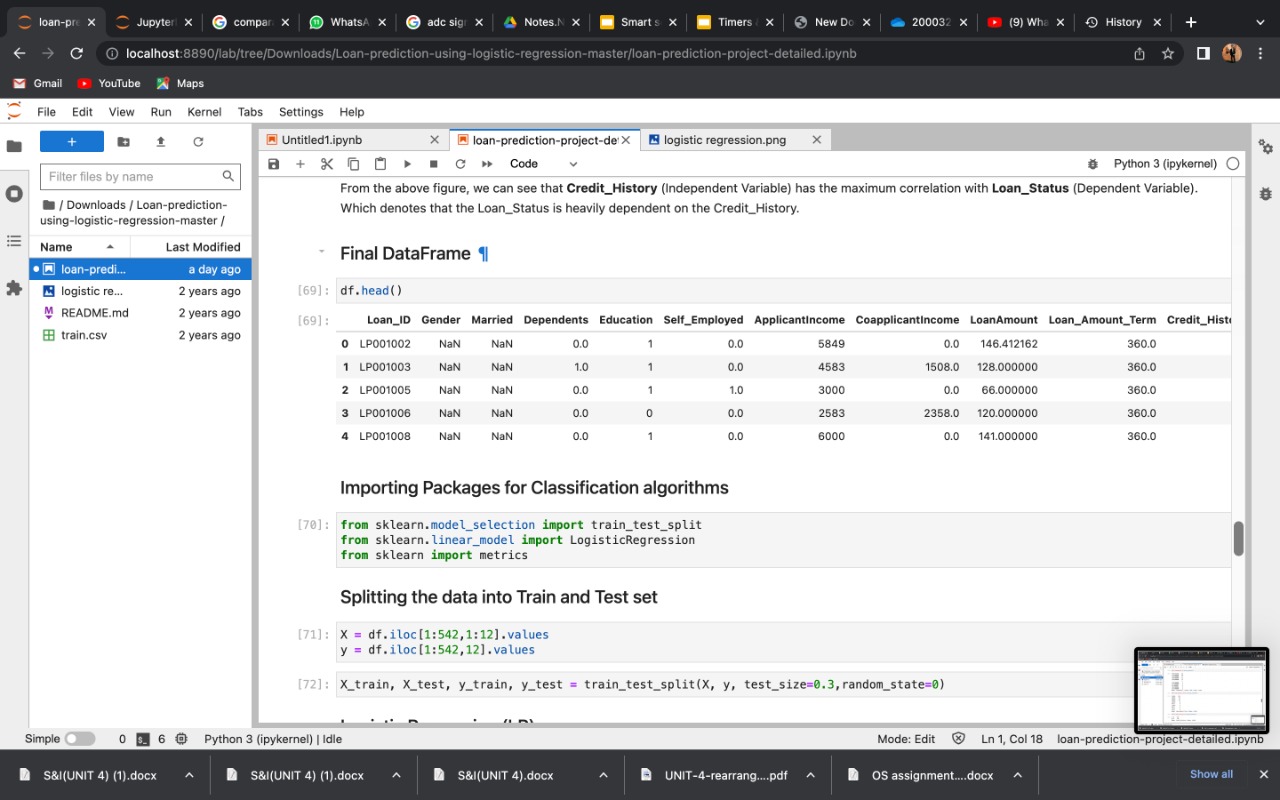
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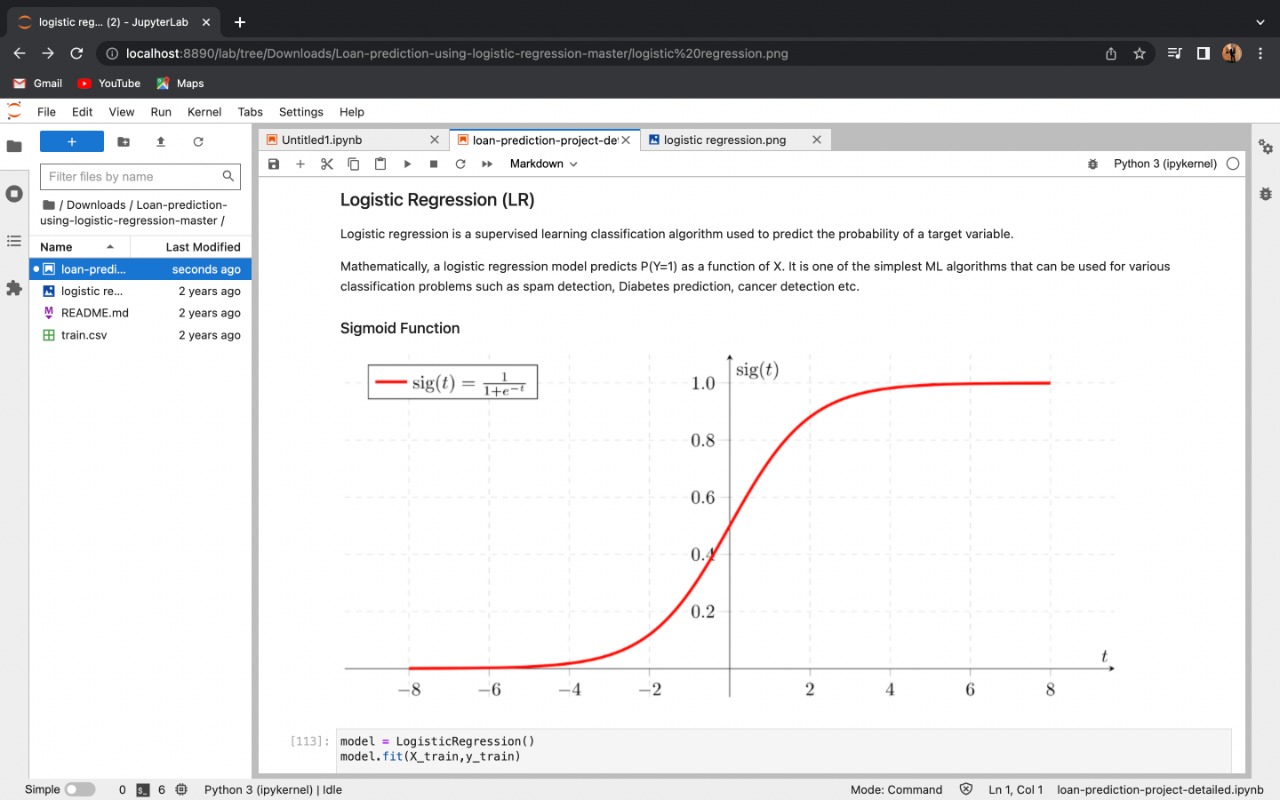
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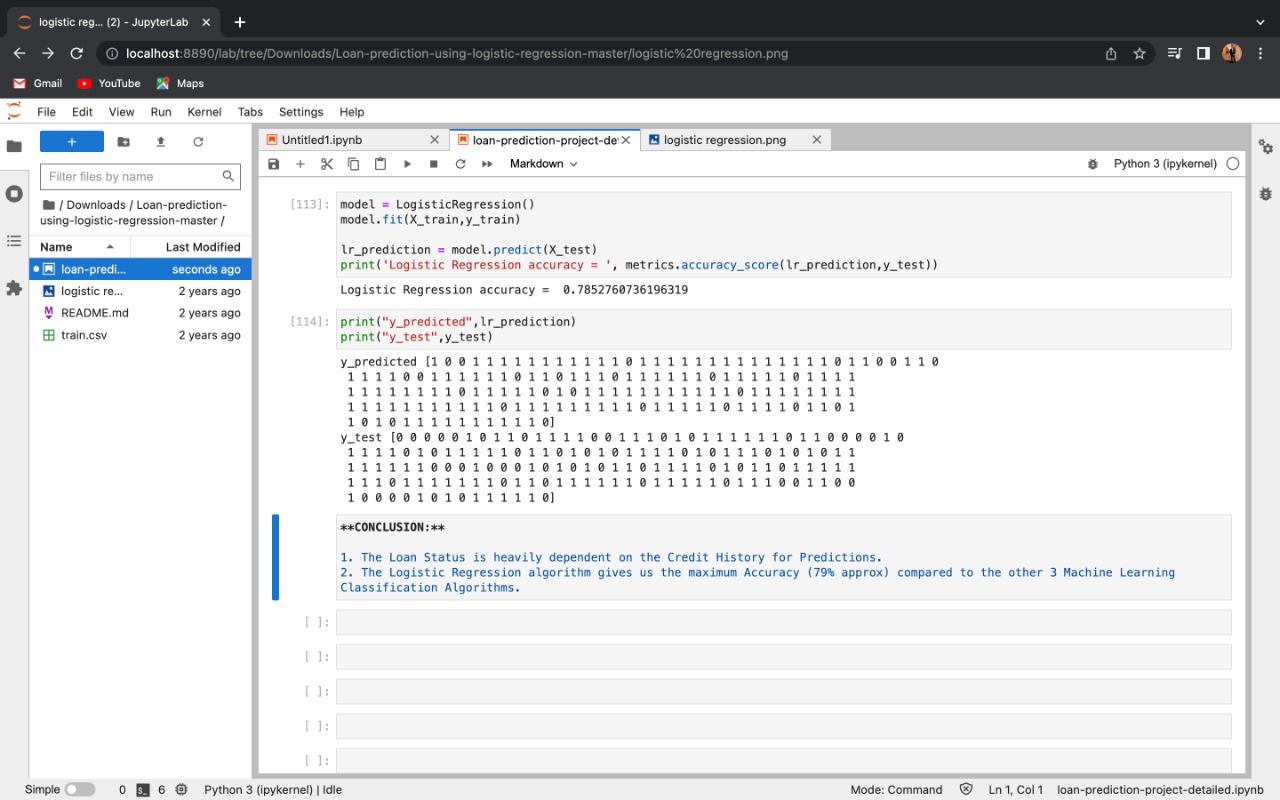
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**CONCLUSION:**

1. The loan Status is heavily dependent on the credit History for Prediction.
2. The Logistic Regression algorithm gives us the maximum Accuracy (79% approx) compared to the other 3 Machine Learning Classification Algorithms.