

# Visualizing And Analyzing The Data

## Descriptive Analysis

|                     |  |
|---------------------|--|
| <b>Date</b>         | <b>6 Nov 2022</b>  |
| <b>Team Id</b>      | <b>PNT2022TMID22689</b>  |
| <b>Project Name</b> | <b>Smart Lender- Applicant<br/>CredibilityPrediction for Loan<br/>Approval</b> |

Descriptive analysis is to study the basic features of data with the statistical process. Here pandas have a worthy function called describe. With this describe function we can understand the unique, top, and frequent values of categorical features. And we can find mean, std, min, max and percentile values of continuous features.

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In [7]: data.describe()
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Out[7]:
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|       | ApplicantIncome | CoapplicantIncome | LoanAmount | Loan_Amount_Term | Credit_History |
|-------|-----------------|-------------------|------------|------------------|----------------|
| count | 614.000000      | 614.000000        | 592.000000 | 600.000000       | 564.000000     |
| mean  | 5403.459283     | 1621.245798       | 146.412162 | 342.000000       | 0.842199       |
| std   | 6109.041673     | 2926.248369       | 85.587325  | 65.12041         | 0.364878       |
| min   | 150.000000      | 0.000000          | 9.000000   | 12.000000        | 0.000000       |
| 25%   | 2877.500000     | 0.000000          | 100.000000 | 360.000000       | 1.000000       |
| 50%   | 3812.500000     | 1188.500000       | 128.000000 | 360.000000       | 1.000000       |
| 75%   | 5795.000000     | 2297.250000       | 168.000000 | 360.000000       | 1.000000       |
| max   | 81000.000000    | 41667.000000      | 700.000000 | 480.000000       | 1.000000       |