

# Loan Data Analysis Documentation

## Overview

This document presents an analysis of the "Loan Data" dataset, focusing on key insights derived from columns such as loan number, due date, state, date of birth (DOB), and loan amount. The analysis involves the calculation of the 'Age' column using DAX, leading to various statistical measures and demographic information.

## Dataset Summary

### Columns:

- Loan Number
- Due Date
- State
- Date of Birth (DOB)
- Loan Amount

## Data Transformation

### Calculated Column: Age

The 'Age' column has been derived from the 'DOB' column using Data Analysis Expressions (**DAX**).

### Calculated Measure: Minimum Age / Minimum Age

- MaxAge = MAX(Portfolio\_data[Age])
- MinAge = MIN(Portfolio\_data[Age])

## Key Statistics

- Average Age: 30 years  
The average age of individuals in the dataset is 30 years.
- Total Loan Amount: \$118 million  
The cumulative loan amount across all entries is \$118 million.
- Loan Count: 15.96 thousand  
The dataset contains 15,960 entries.
- Most Loans Given to State: Maharashtra  
The state of Maharashtra has the highest number of loans issued.
- Age Distribution: 20-40 Years  
The majority of individuals who took loans belong to the age group of 20-40 years.

- Minimum Age: 17 years  
The youngest individual in the dataset is 17 years old.
- Maximum Loan Taken: \$240,000  
The largest loan taken in the dataset is \$240,000.
- Minimum Loan Taken: \$3,000  
The smallest loan amount in the dataset is \$3,000.
- Loan Amount Distribution: Mostly 0-20k  
Loan amounts are predominantly distributed in the range of 0-20k.

## **Conclusion**

This analysis provides a comprehensive overview of the "Loan Data" dataset, highlighting key statistics and patterns. The average age of individuals is 30 years, with most loans issued to people aged 20-40. Maharashtra stands out as the state with the highest loan distribution. Understanding these insights can assist in making informed decisions and strategies related to loan management.