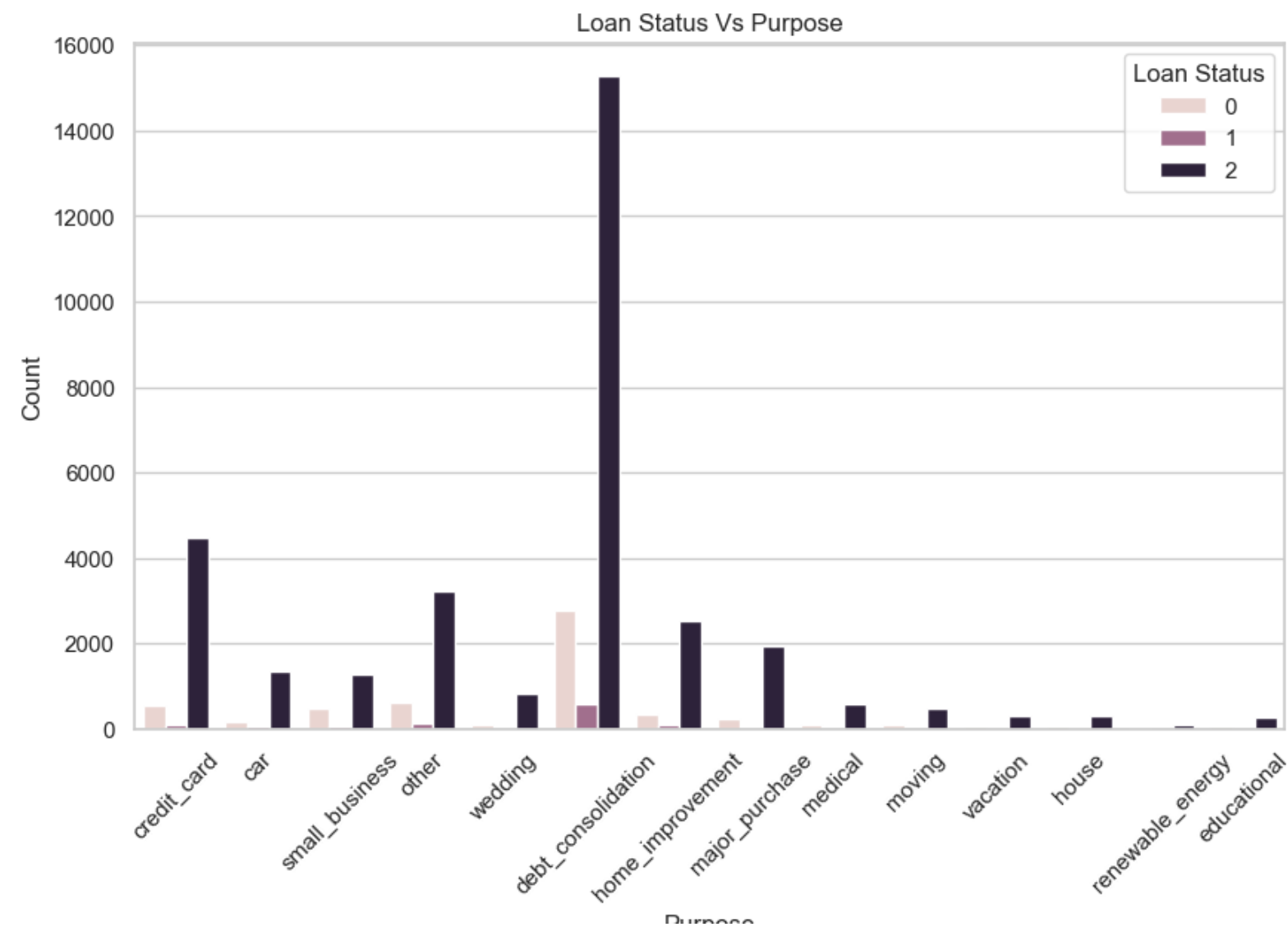
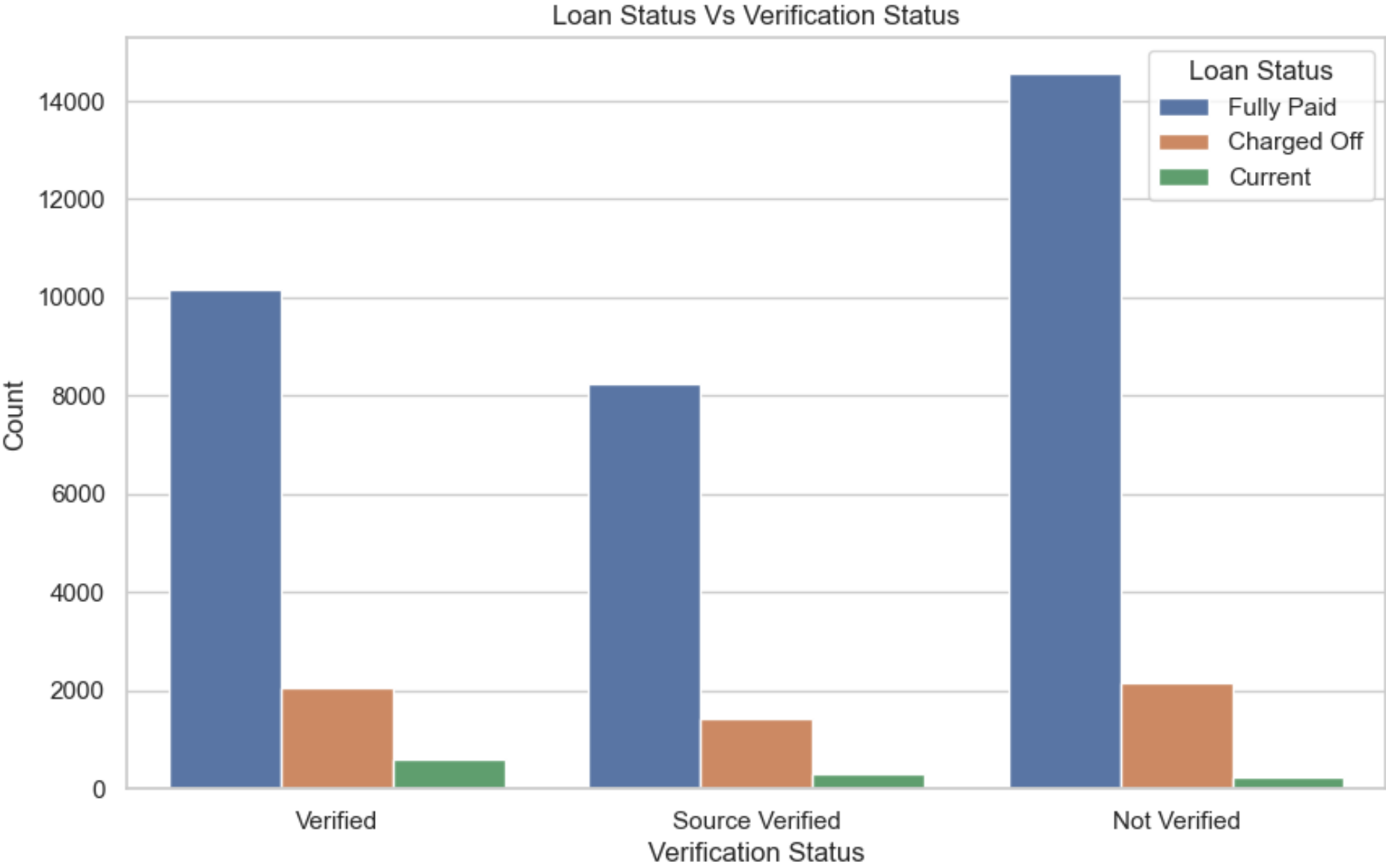


Lending Club Case Study

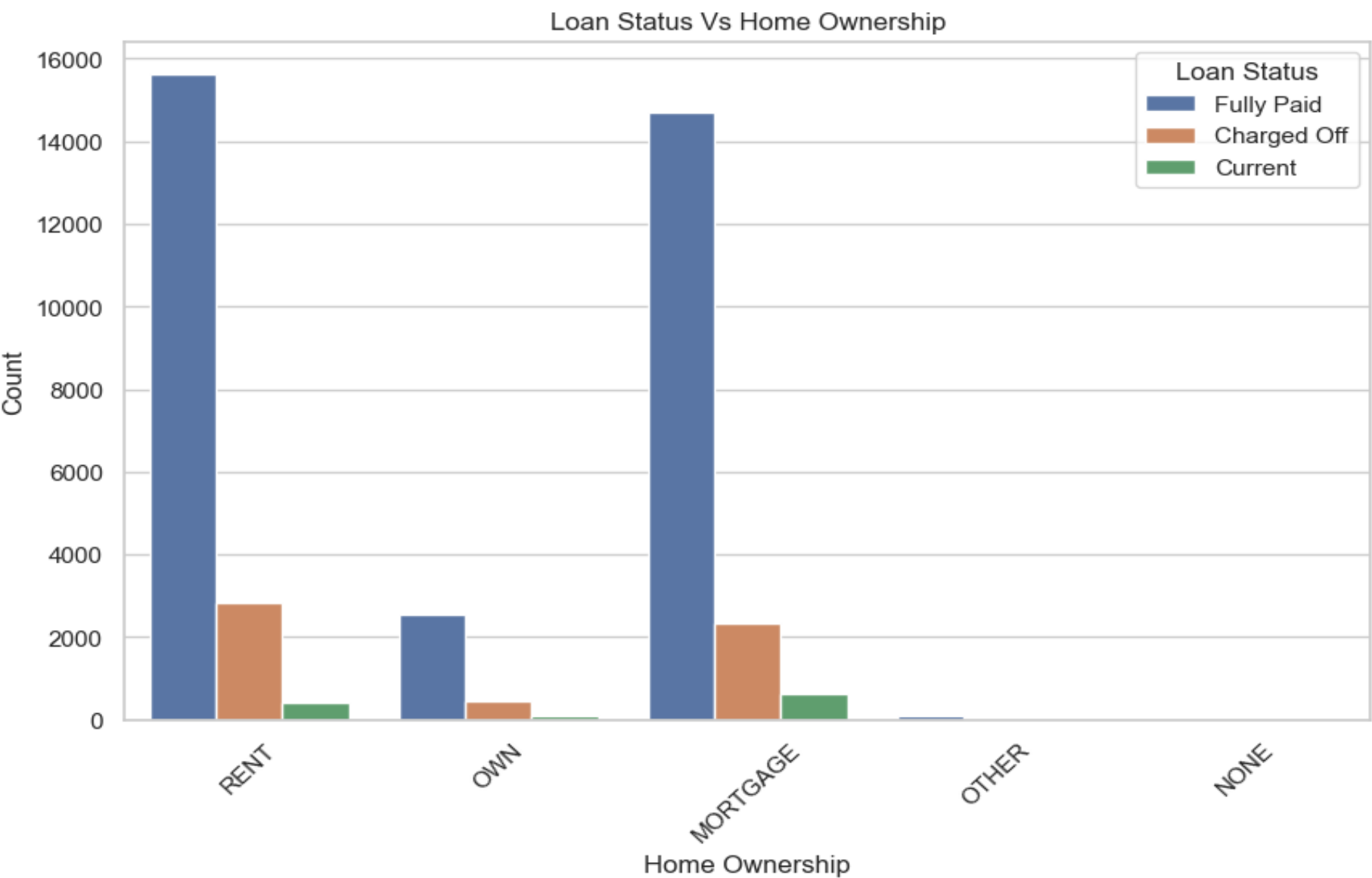
Analysis : Loan Status Vs Purpose



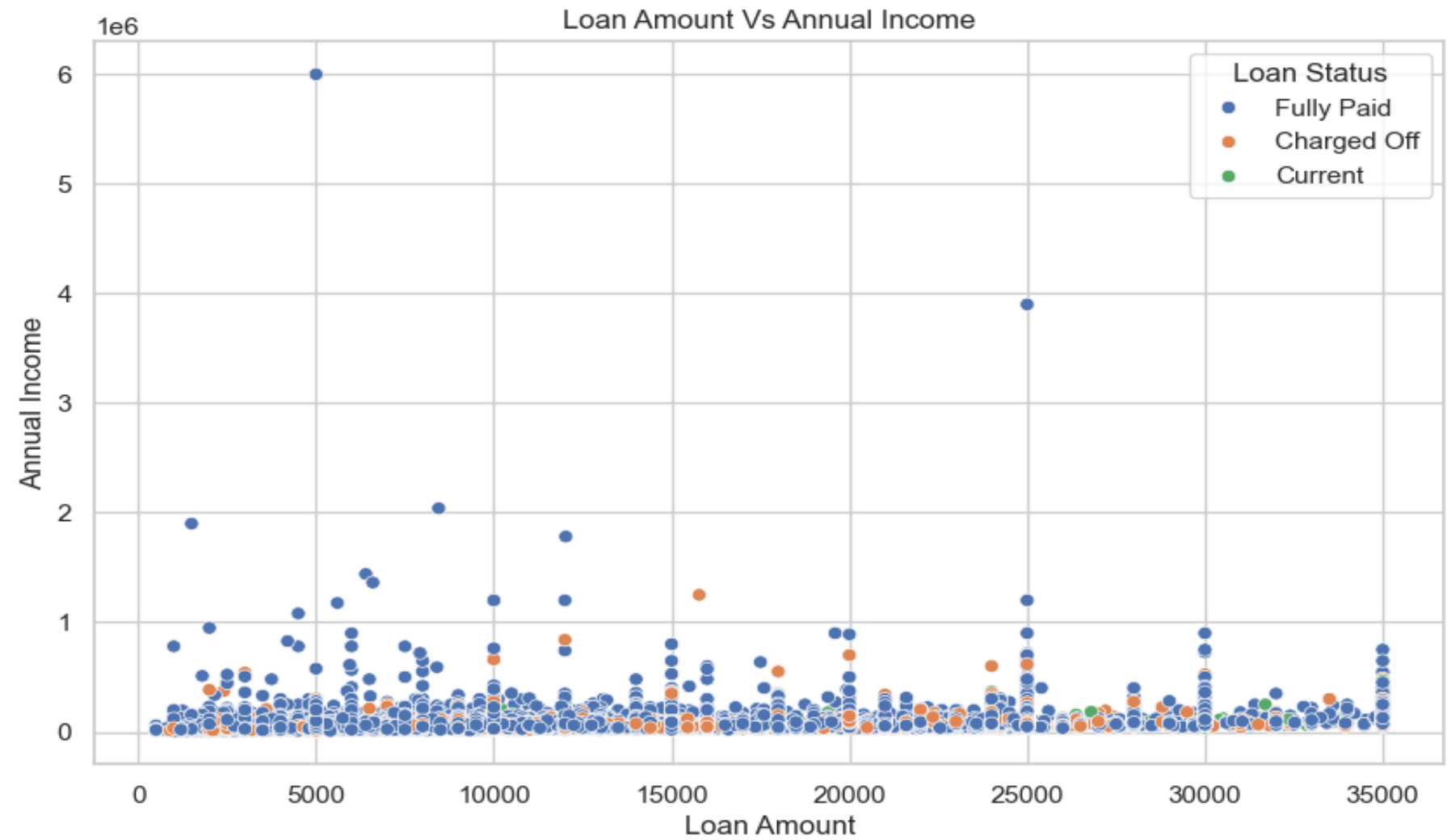
Analysis : Loan Status Vs Verification Status

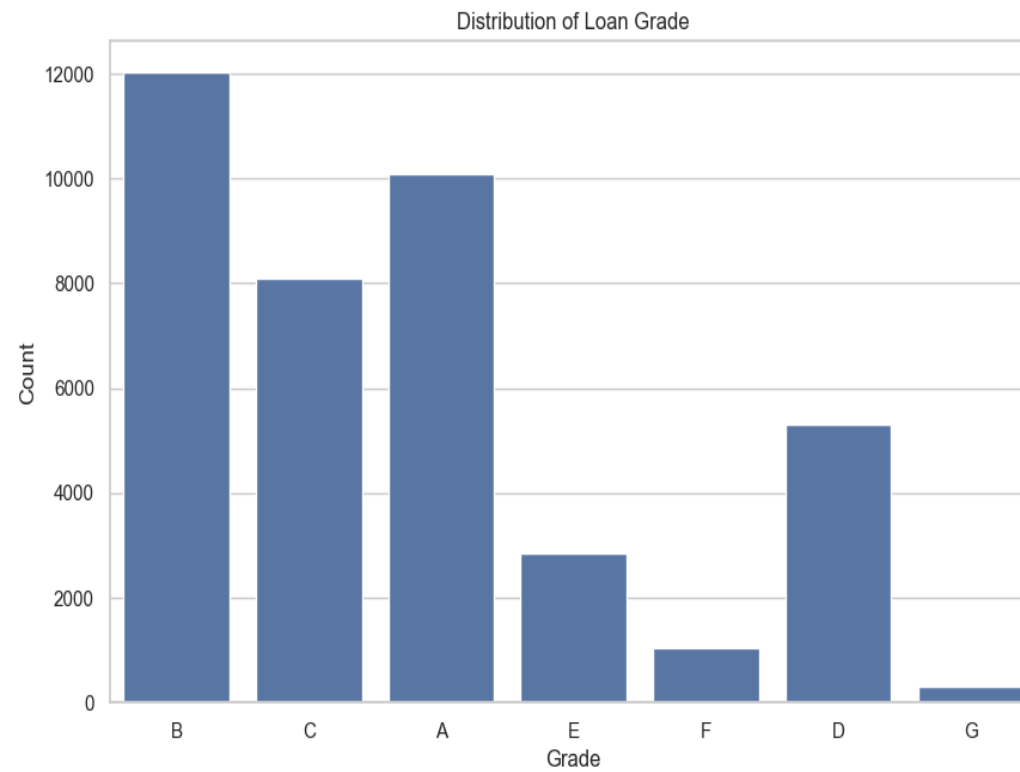
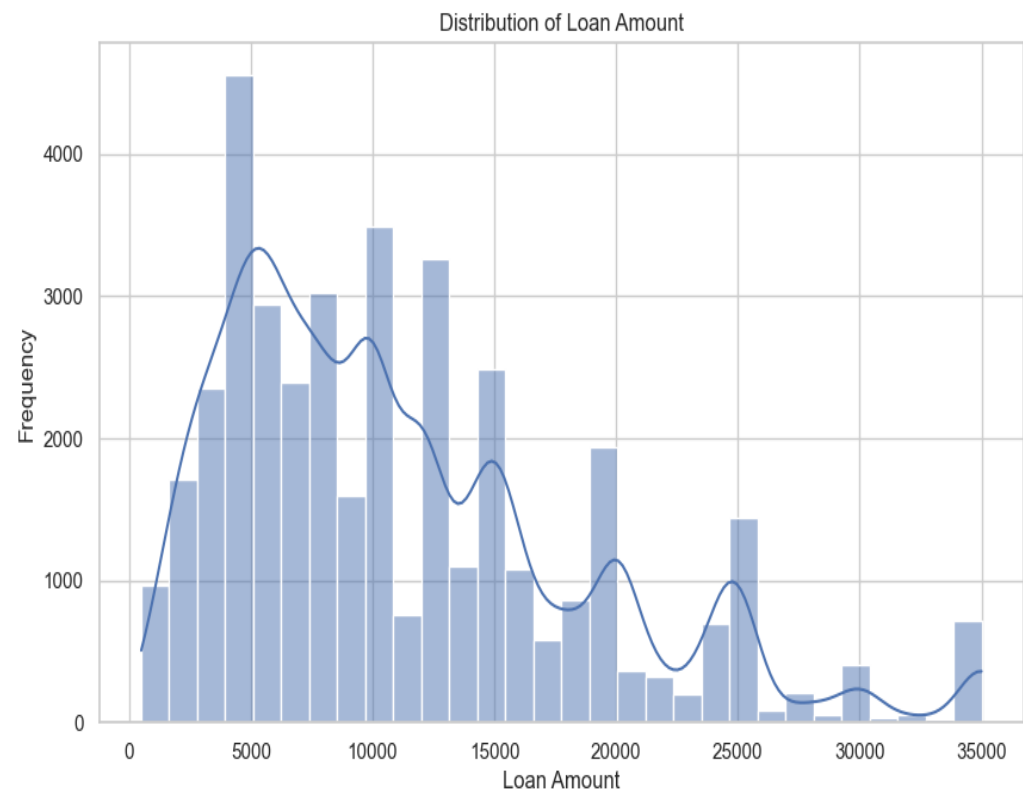


Analysis : Loan Status Vs Home Ownership



Analysis : Loan Amount Vs Home Ownership with Loan Status





key Insights:

1. **Loan Amount:** Higher loan amounts are associated with higher interest rates and a higher likelihood of default.
2. **Interest Rate:** Higher interest rates are strongly correlated with the loan defaults.
3. **Annual Income:** Lower annual income are associated with higher interest rates and a higher likelihood to default.
4. **Loan Grade :** Lower grades (e.g. D,E,F,G) have higher interest rates and a higher likelihood to default.
5. **Employment Length:** Shorter employment length are associated with higher interest rates and a higher likelihood to default.
6. **Home Ownership:** Renters have a higher likelihood of default compared to homeowners.
7. **Verification Status:** Loans with verified income have a lower likelihood to default.

Recommendations:

1. Implement **stricter approval** criteria for higher loan amounts and lower loan grades to migrate risk.
2. **Offer lower interest** rates to applicants with higher annual incomes and longer employment lengths to attract low-risk borrowers.
3. **Priorities loan approvals** for homeowners and applicants with verified income to reduce default rates.
4. Continuously **monitor** and update risk assessment models based on historical data to improve accuracy.
5. Consider offering **financial literacy progress** to borrowers to help them manage their loans better and reduce default rates.