Data: **loan\_data.csv**

<https://www.kaggle.com/datasets/taweilo/loan-approval-classification-data>

Correlation Questions:

1. Is there correlation between loan\_amount and applicant\_income?
2. Is there any relation between loan\_percent\_income and loan\_status?
3. Is there correlation between person\_emp\_exp and loan approval rates?
4. Does person\_emp\_exp correlate with credit\_score?
5. What is the relationship between loan\_int\_rate and credit\_score?
6. How does person\_home\_ownership relate to credit\_score?

Relationships Questions:

1) Does person\_gender affect loan\_status (approved or rejected)?

2) How does person\_education influence loan\_amnt and loan\_int\_rate?

3) Is there a relationship between previous\_loan\_defaults\_on\_file and loan\_status?

4) How does person\_home\_ownership impact loan\_amnt?

5) Does the length of credit history (cb\_person\_cred\_hist\_length) influence credit\_score and loan\_status?

Advanced Analysis:

1. Multivariate Analysis: How do person\_income, person\_emp\_exp, and credit\_score together affect loan\_status?
2. Interaction Effects: Does the interaction between person\_education and person\_gender have a significant effect on loan\_int\_rate?
3. Predictive Modeling: Can you build a predictive model using person\_income, credit\_score, person\_emp\_exp, and previous\_loan\_defaults\_on\_file to predict loan\_status?