CS 211 Final Project Proposal

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Our final project, The goal of this project will be to produce a report on various statistics relating to customers of a credit card company. Credit card data is sensitive information that could lead to re-identification, so we want to use differential privacy to produce these reports. we will look at the average Ages, most common Income levels, Marital status, and Education levels statistics. If time permits, we would also like to look into producing a synthetic representation of one or more columns of the dataset. For the statistics, we will use a few methods, including the Sparse Vector Technique to determine clipping bounds, then add noise with the Laplace Mechanism to compute counts and sums.

The dataset we will be using is located here:
https://www.kaggle.com/datasets/uciml/default-of-credit-card-clients-dataset