**1. Exploratory Data Analysis (EDA)**

* **Understand the Data**: Familiarize yourself with the dataset. Identify what each column represents, the type of data (categorical, numerical), and any missing values.
* **Visualize Data**: Create visualizations to understand relationships between variables. For example, plot the number of loans that are fully paid versus those that are charged-off.
* **Statistical Analysis**: Perform basic statistical analyses to uncover trends, averages, and distributions within the data.

**2. Feature Engineering**

* **Data Cleaning**: Handle missing values, eliminate redundant features, and convert categorical data into a format suitable for modeling (like one-hot encoding).
* **New Features**: Based on your EDA findings, you might create new features that better capture the trends and patterns you've observed, which could be more predictive of the outcome.

**3. Predictive Modeling**

* **Choose a Model**: Based on the nature of the data, select appropriate machine learning models. Logistic regression, decision trees, or ensemble methods like random forests or gradient boosting might be suitable.
* **Train the Model**: Use the historical data (past loan applicants) to train your model. The target variable will be whether someone has 'defaulted' or not.
* **Model Evaluation**: Evaluate the model using appropriate metrics (like accuracy, precision, recall, F1 Score, ROC-AUC). Ensure your model is neither overfitting nor underfitting.

**4. Risk Assessment and Decision Strategy**

* **Interpret Model Results**: Understand which features are most influential in predicting defaults. This insight will help in assessing risk more accurately.
* **Decision Strategies**: Propose strategies based on your model’s predictions. For example, you could suggest adjusting interest rates based on risk level, setting stricter credit score requirements, or increasing scrutiny for certain types of loans.

**5. Reporting**

* **Document Your Findings**: Prepare a report or presentation that summarizes your methodology, findings, model performance, and recommendations for risk management.
* **Actionable Insights**: Highlight key insights that can help LendingClub minimize losses due to defaults. This might include profiles of high-risk applicants or recommendations for policy adjustments.

**Research Risk Analytics**

Before diving into data analysis, familiarizing yourself with the domain of risk analytics in lending is important. This will help you understand the common factors affecting credit risk and default rates, which can include:

* **Credit Score**: Typically, a lower credit score suggests a higher risk of default.
* **Income Level**: Higher income might indicate a lower risk of default as the applicant likely has more financial stability.
* **Debt-to-Income Ratio**: A high ratio might suggest that the applicant has too much debt relative to their income, increasing the likelihood of default.
* **Employment Status**: Employment stability is often linked to the ability to repay loans.
* **Loan Characteristics**: The amount of the loan, the interest rate, the term of the loan, and the type of loan can all influence default probabilities.