**Assignment 1**

**Step 1:** Collect data from data engineer and ask for their business system and understand their business data; so that I can understand the business process and retention goals.

**Step 2:** prepare the data by cleaning it if there is any missing or unordered records. Ensure data is consistent and filter out irrelevant data.

**Step 3:** Discover and analyze the dataset including information, demographics, account details, service used and churn status. Add new features if it is needed for modeling accuracy and understanding the retention.

**Step 4:** Check the churn status and understand why customers leave. Make visualization for the relationships between churns and other data factors to investigate the reasons in a better way.

**Step 5:** Model the improved dataset that is trying to make new evaluations and predictions by testing and training retain reasons and insights.

**Step 6:** Generate insights like:

For the new customers and those of high risk of churning: offer discounts

For the loyal customers: special offer or gifts