

Module 2: Assignment 3 – Mutate Function

Problem Statement:

Jonas has performed data manipulation using `filter()` and `select()`. Jonas realizes the need of adding certain columns of the customers to the dataset. Now, further Jonas wants to manipulate data by adding age column to the dataset using `mutate()` function. He lists down the tasks that need to be performed.

Tasks to be performed:

1. Add a column named 'Age' and assign a random value in customer churn dataset that lies within a range using `sample()` function based in the following conditions:
 - a. If the customer is a senior citizen (`SeniorCitizen==1`), then the age assigned to the customer lies between 56 and 100.
 - b. If the customer is not a senior citizen (`SeniorCitizen==0`), then the age assigned to the customers lies between 16:55
 2. Create a column named 'Customer_Category' based on the following condition:
 - a. The customers whose monthly charges are less than 45 will be named as 'Low Paying' customers.
 - b. The customers whose monthly charges are less than '90' will be named as 'Medium Paying' customers.
 - c. The customers whose monthly charges are greater than '90' will be named as 'High Paying' customers.
 3. Create a column named "Security" based on the following condition:
 - a. The customers who have opted for 'Online Security' will be marked as 'Secure'.
 - b. The customers who have not opted for 'Online Security' will be marked as 'Not Secure'.
-