1. Define the business problem
2. From the data given find the input and output variables
3. Identify the data types
4. Decided which hypothesis test have to perform
5. Check the data normality , If Yes
6. Check the variance are equal or not
7. Based on defined problem apply the hypothesis testing and find the solution.
8. **Business Problem**

Ad promoting full interest rate waiver => leads to increase in purchases

Ad promoting Christmas Add promotion => leads to increase in purchases

1. **Input variable: X 1 and X2**

X1 = full interest rate waiver

X2 = Christmas add promotion

1. **Data Types:**

Output variable: continuous

Input variable: Discrete with 2 categories

1. **Check the data normality**

Ho: Data is normal

Ha: Data is not normal

**Interest rate waiver**

**Stat >> basics statistics >> Normality test**

P values is 0.362 => p > 0.05 => P high null fly => Accept H0

Data is normal

**Christmas Add Promotion**

P values is 0.103 => p > 0.05 => P high null fly => Accept H0

Data is normal

1. **Check variance are equal or not**

Ho: variance is equal

Ha: variance is not equal

**Stat >> basic statistics >> 2 variance test**

Consider Bonetts Test value for p value

P = 0.662 => p > 0.05

P high null fly => accept Ho

Variance is equal

1. **Perform 2 T test**

H0: FIW = CAP

Ha: FIW is not equal to CAP

**Stat >> basic statistics >> 2 Sample test**

P = 0.024 => p less than 0.05 =< p low null go => accept Ha

FIw is not equal to CAP

H0: average purchase made from Full interest rate waiver < Average purchase made because of standard promotion

Ha: Average purchase made because of full interest rate > average purchase made because of Standard Promotion

From Table p value is 0.012 which is less than 0.05

P is low H0 will go => reject H0 – Accept Ha

Average purchase made because of full interest rate > average purchase made because of Standard Promotion

Solution: Add promotion made on full interest rate waiver increases the purchases of credit card