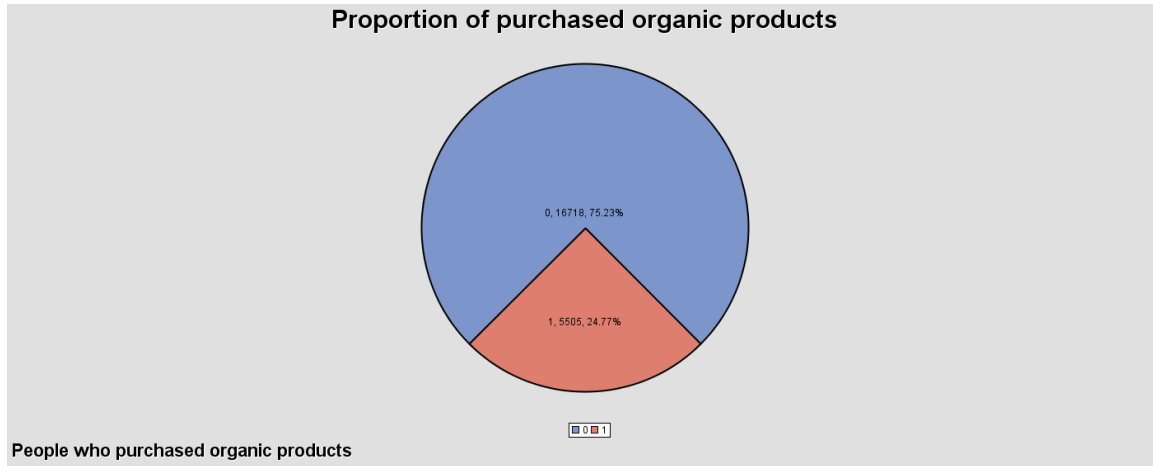


## SEIS632-02-Assignment 1

Submitted By – Shivali Dalmia

Question1: What is the proportion of individuals who purchased organic products?

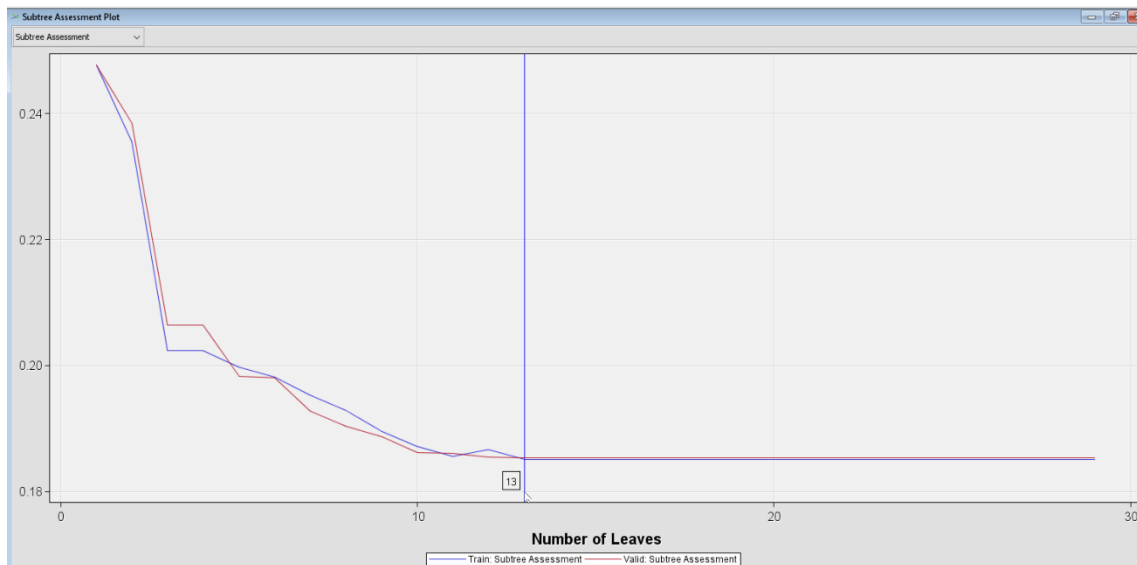
Answer1: 24.77% individuals purchased organic products.



## Model Assessment Statistic – Decision

Question2: How many leaves are in the optimal tree?

Answer2: There are 13 leaves in optimal tree.



Question3: Which variable was used for the first split?

Answer3: DemAge variable was used for the first split.(Logworth-323.299)

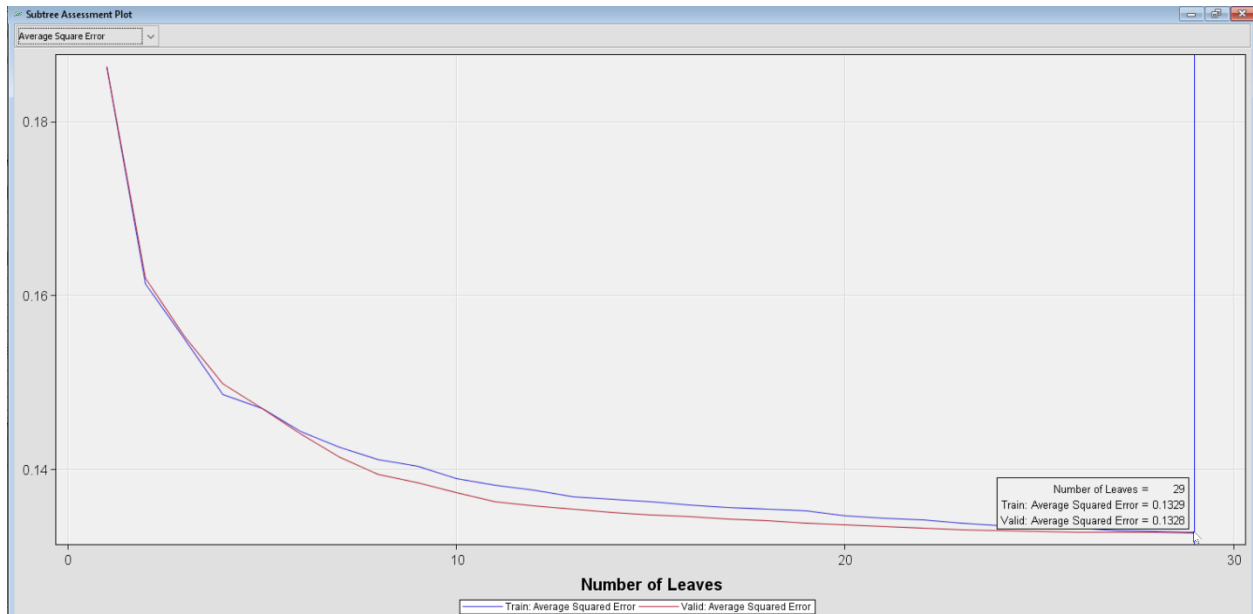
Question4: What were the competing splits for this first split?

Answer4: The other competing splits at second, third and fourth place were DemAffl(200.188), DemGender(133.1391), PromSpend(32.9677) respectively.

### Model Assessment Statistic – Average Square Error

Question5: How many leaves are in the optimal tree?

Answer5: There are 29 leaves in optimal tree.



Question6: Which variable was used for the first split?

Answer6: DemAge variable was used for the first split.(Logworth-323.299)

Question7: What were the competing splits for this first split?

Answer7: The other competing splits at second, third and fourth place were DemAffl(200.188), DemGender(133.1391), PromSpend(32.9677) respectively.