**summarise() function Assignment**

**Problem Statement:**

Sam’s next exam would be on the summarise() function from the dplyr package. You would be asked questions on what you’ve learnt from the respective module.

Questions:

1. Get the median, variance & standard deviation for the ‘tenure’ column

> summarise(customer\_churn,mediun\_tenure = median(tenure))

mediun\_tenure

1 29

> summarise(customer\_churn,var\_tenure = var(tenure))

var\_tenure

1 603.1681

> summarise(customer\_churn,sd\_tenure = sd(tenure))

sd\_tenure

1 24.55948

2. Get the median, variance & standard deviation for the ‘MonthlyCharges’ column

> summarise(customer\_churn,mediun\_mc = median(MonthlyCharges))

mediun\_mc

1 70.35

> summarise(customer\_churn,var\_mc = var(MonthlyCharges))

var\_mc

1 905.4109

> summarise(customer\_churn,sd\_mc = sd(MonthlyCharges))

sd\_mc

1 30.09005

3. Get the standard deviation of ‘tenure’ & group it w.r.t ‘PaymentMethod’ column

> summarise(group\_by(customer\_churn,PaymentMethod),sd\_tenure = sd(tenure))

# A tibble: 4 x 2

PaymentMethod sd\_tenure

*<fct>* *<dbl>*

1 Bank transfer (automatic) 23.2

2 Credit card (automatic) 23.3

3 Electronic check 22.4

4 Mailed check 21.2

4. Get the median of ‘MonthlyCharges’ & group it w.r.t ‘Contract’ column

> summarise(group\_by(customer\_churn,Contract),md\_tenure = median(MonthlyCharges))

# A tibble: 3 x 2

Contract md\_tenure

*<fct>* *<dbl>*

1 Month-to-month 73.2

2 One year 68.8

3 Two year 64.4

5. Get the variance of ‘TotalCharges’ & group it w.r.t ‘InternetService’ column

> summarise(group\_by(customer\_churn,InternetService), var\_tenure = var(TotalCharges))

# A tibble: 3 x 2

InternetService var\_tenure

*<fct>* *<dbl>*

1 DSL NA

2 Fiber optic 6606031.

3 No NA