**Sqldf Assignment**

**Problem Statement:**

Sam’s next exam would be on the sqldf package. You would be asked questions on what you’ve learnt from the respective module.

Questions:

1. Select the ‘OnlineBackup’ column from the customer\_churn dataframe & store the result in ‘customer\_onine\_backup’

> sqldf("select OnlineBackup from customer\_churn") -> customer\_online\_backup

> head(customer\_online\_backup)

OnlineBackup

1 Yes

2 No

3 Yes

4 No

5 No

6 No

2. Select the ‘StreamingTV’, ‘StreamingMovies’ & ‘Contract’ columns and store the result in

‘customer\_streaming\_contract’

> sqldf("select StreamingTV, StreamingMovies, Contract from customer\_churn") -> customer\_s\_c

> head(customer\_s\_c)

StreamingTV StreamingMovies Contract

1 No No Month-to-month

2 No No One year

3 No No Month-to-month

4 No No One year

5 No No Month-to-month

6 Yes Yes Month-to-month

3. Select all the customers whose payment method is ‘mailed check’ and store the result in

‘customer\_mail’

> sqldf("select \* from customer\_churn where PaymentMethod = 'Mailed check'") -> customer\_mail

> head(customer\_mail)

customerID gender SeniorCitizen Partner Dependents tenure PhoneService MultipleLines InternetService

1 5575-GNVDE Male 0 No No 34 Yes No DSL

2 3668-QPYBK Male 0 No No 2 Yes No DSL

3 6713-OKOMC Female 0 No No 10 No No phone service DSL

4 9763-GRSKD Male 0 Yes Yes 13 Yes No DSL

5 8191-XWSZG Female 0 No No 52 Yes No No

6 1066-JKSGK Male 0 No No 1 Yes No No

OnlineSecurity OnlineBackup DeviceProtection TechSupport StreamingTV

1 Yes No Yes No No

2 Yes Yes No No No

3 Yes No No No No

4 Yes No No No No

5 No internet service No internet service No internet service No internet service No internet service

6 No internet service No internet service No internet service No internet service No internet service

StreamingMovies Contract PaperlessBilling PaymentMethod MonthlyCharges TotalCharges Churn

1 No One year No Mailed check 56.95 1889.50 No

2 No Month-to-month Yes Mailed check 53.85 108.15 Yes

3 No Month-to-month No Mailed check 29.75 301.90 No

4 No Month-to-month Yes Mailed check 49.95 587.45 No

5 No internet service One year No Mailed check 20.65 1022.95 No

6 No internet service Month-to-month No Mailed check 20.15 20.15 Yes

4. Select all the Female customers whose tenure is of 1 month & Payment Method is ‘mailed

check’ and store the result in ‘customer\_random\_selection’

> sqldf("select \* from customer\_churn where gender = 'Female'and tenure = 1 and PaymentMethod = 'Mailed check' ") -> customer\_random\_selection

> head(customer\_random\_selection)

customerID gender SeniorCitizen Partner Dependents tenure PhoneService MultipleLines InternetService

1 0390-DCFDQ Female 1 Yes No 1 Yes No Fiber optic

2 6582-OIVSP Female 0 No No 1 Yes No DSL

3 2232-DMLXU Female 0 Yes No 1 Yes No DSL

4 2080-SRCDE Female 0 No Yes 1 Yes Yes No

5 6390-DSAZX Female 0 No Yes 1 Yes No Fiber optic

6 7302-ZHMHP Female 0 No No 1 Yes No No

OnlineSecurity OnlineBackup DeviceProtection TechSupport StreamingTV

1 No No No No No

2 No No No No No

3 No No No No Yes

4 No internet service No internet service No internet service No internet service No internet service

5 Yes No No No No

6 No internet service No internet service No internet service No internet service No internet service

StreamingMovies Contract PaperlessBilling PaymentMethod MonthlyCharges TotalCharges Churn

1 No Month-to-month Yes Mailed check 70.45 70.45 Yes

2 No Month-to-month No Mailed check 45.30 45.30 No

3 No Month-to-month No Mailed check 55.20 55.20 Yes

4 No internet service Month-to-month No Mailed check 25.40 25.40 No

5 No Month-to-month Yes Mailed check 73.60 73.60 Yes

6 No internet service Month-to-month No Mailed check 19.15 19.15 No