**Case study**

QUESTION 1

The file attached (Q1 Data tab) has got some fields that we would like you to manipulate

The fields include the following:

1)**ContractID** - which is similar to a LoanID (Note that a LoanID can have several payments made to it until a customer finishes paying.

2)**CustomerID** - (Note that a Customer can have several ContractIds that means several Loans)

3)**Deposit -** (Down payment done by the customer)

4)**Product Price -** (This is the Cost of the Device in this case the solar panels we sale to the customer)

5)**IncomingTransactionId -**(This is the uniqueId produced every time a customer initiates a payment)

6)**Amount -** (what the customer has paid)

7)**Region** – Where the customer comes from

Write a SQL query using a DBMS system of your choice is to get the total amount paid by each customer, create a new column called Total Amount Paid and use this total amount paid to create a column called Outstanding balance in which you will add the customer’s outstanding balance after calculating the total amount paid.

QUESTION 2

The file attached (Q1 Data tab) has got some fields that we would like you to manipulate

The fields include the following:

1)**ContractID** - which is similar to a LoanID

2)**CustomerID** - (Note that a Customer can have several ContractIds that means several Loans)

3)Activation\_date - Date customer was activated as a sale in the system

4)Date\_of\_activity - Customer performance as at certain period of time.

5)Sum paid to date - Total amount paid by customer as at date of activity

6)Arrears - Amount customer owes as at date of activity

Write a SQL query using a DBMS of your choice to get the sum\_paid\_to\_date and arrears of each contractid at their maximum date of activity