Q1 - SQL TEST

The purpose of this test is to take three input tables (listed below) and then create a view, stored procedure, ETL process or some other automated mechanism using SQL server to produce the required result set.

The scenario is that we are looking at two separate systems in a bank that store details about bonds and credit cards respectively. The essence of this exercise is that you need to do the following to produce the desired result set:

- Find the latest balance for each customer in each system
- Combine the latest balances for each customer in a single result set
- Ensure customer names are used in the result set

The input tables are listed below

- BondBalance
- CreditCardBalance
- Customer

BondBalance				CreditCardBalance				Customer	
ID	CustID	BalanceDat	Balance	ID	CustID	BalanceDate	Balance	ID	CustomerName
1	1	2018-12-01	120000.00	1	1	2019-01-01	2000.00	1	John Fosudo
2	2	2019-01-01	200000.00	2	1	2019-02-01	2500.00	2	Clara Ayomikun
3	2	2019-02-01	198000.00	3	2	2019-02-01	1250.00	3	Tsepho Chinedu
4	2	2019-03-01	196000.00	4	3	2019-01-01	800.00	4	Sandeep Sharma
5	3	2019-01-01	600000.00	5	3	2019-02-01	120.00		
6	4	2019-01-01	450000.00	6	4	2019-01-01	600.00		
7	4	2019-02-01	445000.00						

Desired Result

The required result set is shown below-write the script, code or process that would build this result set automatically from the input tables.

	CustomerName	MaxDate	Balance	AccountType
1	John Fosudo	2018-12-01	120000.00	Bond
2	John Fosudo	2019-02-01	2500.00	CreditCard
3	Clara Ayomikun	2019-03-01	196000.00	Bond
4	Clara Ayomikun	2019-02-01	1250.00	CreditCard
5	Tsepho Chinedu	2019-01-01	600000.00	Bond
6	Tsepho Chinedu	2019-02-01	120.00	CreditCard
7	Sandeep Sharma	2019-02-01	445000.00	Bond
8	Sandeep Sharma	2019-01-01	600.00	CreditCard

Q2 – POWER BI TEST

The purpose of this test is to evaluate your ability to make sense of raw data, understanding the key data points and presenting them in a manner that is easily digestible by stakeholders.

Attached to the email is a data dump **Power BI AssignmentDump** containing raw dummy sales data. Using this data, create a one-page dashboard on Power BI that includes all the key datapoints you can derive from the data.

Please send back the pbi file along with the submission from the SQL test in Q1.