

**Candidate Name:**

A database has the following table structure.

Please create T-SQL statements to return the following requested results or perform the described action:

**Note: Relationships between tables can be inferred from the field names.**

Example:

*Q: List all Customers sorted by CustomerName*

*A: SELECT CustomerID, CustomerName FROM tblCustomer ORDER BY CustomerName*

1. List all customers and the number of orders placed by each
  - o Return CustomerID, CustomerName, OrderTypeName and OrderCount in in CustomerName order.
2. List all Assignment orders that have a “Received” activity but not a “Delivered” activity for ABC Bank
  - o Return CustomerName, CustomerID, LoanNumber, and “received date” (*Activity Date for received*)
3. Add new order type called “Document Retrieval”
4. Add “Printed” activity for order with LoanNumber = 45566856 (use current date/time for the Activity Date)
5. List all orders by customer and the time difference from:
  - “Received” to “Keyed” as [TurnTime1]
  - “Keyed” to “Printed” as [TurnTime2]
  - “Printed” to “Delivered” as [TurnTime3]
  - “Received” to “Delivered” as [TurnTime4]
  - o Show all time differences in minutes
  - o Return CustomerName, OrderTypeName, LoanNumber, TurnTime1, TurnTime2, TurnTime3, TurnTime4
6. Create new DocumentRetrieval orders for every assignment order. Because new Assignment orders may be added every day, make sure that your query here can be run multiple times without creating duplicate document retrieval orders each time.
  - o Note: Every order must have a “received” activity. (Use current date/time for the activity date)

tblCustomer	
CustomerID	CustomerName
1	ABC Bank
2	Chase Bank
tblOrderType	
OrderTypeID	OrderTypeName
1	Assignment
2	LienRelease
tblActivity	
ActivityID	ActivityName
1	Received
2	Keyed
3	Printed
4	Delivered To Customer

tblOrder			
OrderID	CustomerID	OrderTypeID	LoanNumber
1	1	1	45584565
2	1	1	45566856
3	1	1	45565584
4	1	1	45588545
tblOrderActivity			
OrderID	ActivityID	ActivityDate	
1	1	4/16/2007 8:34:00 AM	
1	2	4/16/2007 9:22:00 AM	
1	3	4/16/2007 9:51:00 AM	
1	4	4/16/2007 4:14:00 PM	
2	1	4/16/2007 8:34:00 AM	
3	1	4/16/2007 8:34:00 AM	
3	2	4/16/2007 9:22:00 AM	
3	3	4/16/2007 9:51:00 AM	

3	4	4/16/2007 4:14:00 PM
4	1	4/16/2007 8:34:00 AM
4	2	4/16/2007 9:22:00 AM
4	3	4/16/2007 9:51:00 AM