1. We need 3 tables:

Table 1: #Agent

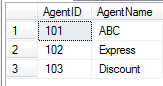


Table 2: #Product

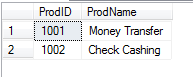


Table 3: #Transaction

1 Order = 1 Transaction

Table

Description automatically generated

**Question 1 (5’):**

Please create 3 temp tables in db.

#Agent: AgentID int

AgentName varchar(100)

#Product: ProdID int

ProdName varchar(100)

#Transaction: OrderID int

AgentID int

ProdID int

TransactionDate datetime

OrderAmount money

**Question 2 (5’):**

Write the query to add a column AgentNo using AgentID and AgentName in table #Agent, then update AgentNo column in #Agent as AgentID + AgentName

Output:

Select \* from #Agent

Graphical user interface, application

Description automatically generated with medium confidence

**Question 3 (5’):**

Write the query to insert a new product in #Product table

ProdID: 1003

ProdName: Bill Payment

Output:

Select \* from #Product

Graphical user interface, text, application

Description automatically generated

**Question 4 (5’):**

Write the query to update ‘Money Transfer’ to ‘MT’, ‘Check Cashing’ to ‘CC’ and ‘Bill Payment’ to ‘BP’ in table #Product.

Output from: Select \* from #Product

Graphical user interface, table

Description automatically generated

**Question 5 (10’):**

Write the query to select the agents with total order amount for all products greater than $100 in 2 months (Jan to Feb 15).

Output columns: AgentID, AgentName, Total Transaction, Total Order Amount

Graphical user interface, application

Description automatically generated

**Question 6 (10’):**

Write the query and return the result as below from 3 tables

1 order = 1 transaction

A screenshot of a computer

Description automatically generated with medium confidence

**Question 7 (10’):**

Write the query and return the result as below from 3 tables

1 order = 1 transaction

Table

Description automatically generated

**Question 8 (15’):**

Write the query and return Jan 2015 Money Transfer total transaction and total order amount by agent by order amount tiers:

0-24.99

25-49.99

50-99.99

100+

Table

Description automatically generated

**Question 9 (15’):**

Please rank agents by Money Transfer and Check Cashing by total OrderAmount in descending order (rank () over).

Output columns: AgentID, AgentName, ProdName, OrderAmount, Rank

Table

Description automatically generated

1. Please write a function to parse only numbers from one string. **(20’)**

Input: ‘My phone number is 323-111-CALL’

Output: ‘323111’