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## Problem Statement:

You are the database developer of an international bank. You are responsible for managing the bank's database. You want to use the data to answer a few questions about your customers regarding withdrawal, deposit and so on, especially about the transaction amount on a particular date across various regions of the world. Perform SQL queries to get the key insights of a customer.

## Dataset:

The 3 key datasets for this case study are:

- a. Continent: The Continent table has two attributes i.e., region\_id and region\_name, where region\_name consists of different continents such as Asia, Europe, Africa etc., assigned with the unique region id.
- b. Customers: The Customers table has four attributes named customer\_id, region\_id, start\_date and end\_date which consists of 3500 records.
- c. Transaction: Finally, the Transaction table contains around 5850 records and has four attributes named customer\_id, txn\_date, txn\_type and txn\_amount.

- 1. Display the count of customers in each region who have done the transaction in the year 2020.
- 2. Display the maximum and minimum transaction amount of each transaction type.
- 3. Display the customer id, region name and transaction amount where transaction type is deposit and transaction amount > 2000.
- 4. Find duplicate records in the Customer table.
- 5. Display the customer id, region name, transaction type and transaction amount for the minimum transaction amount in deposit.
- 6. Create a stored procedure to display details of customers in the Transaction table where the transaction date is greater than Jun 2020.
- 7. Create a stored procedure to insert a record in the Continent table.
- 8. Create a stored procedure to display the details of transactions that happened on a specific day.
- 9. Create a user defined function to add 10% of the transaction amount in a table.

10. Create a user defined function to find the total transaction amount for a given transaction type.
  11. Create a table value function which comprises the columns customer\_id, region\_id ,txn\_date , txn\_type , txn\_amount which will retrieve data from the above table.
  12. Create a TRY...CATCH block to print a region id and region name in a single column.
  - 13 Create a TRY...CATCH block to insert a value in the Continent table.
  - 14 Create a trigger to prevent deleting a table in a database.
  - 15 Create a trigger to audit the data in a table.
  - 16 Create a trigger to prevent login of the same user id in multiple pages.
  - 17 Display top n customers on the basis of transaction type.
  - 18 Create a pivot table to display the total purchase, with draw a land deposit for all the customers.
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