ASSIGNMENT 2

1) (2 Marks) Write a query to list all system databases in SQL Server.

```
-- 1) (2 Marks) List all system databases in SQL Server
SELECT name FROM sys.databases
WHERE database_id <= 4;
```

100 %

Results | Messages

	name
1	master
2	tempdb
3	model
4	msdb

2) (2 Marks) Identify the physical database files (MDF, LDF) of a user-defined database named "SalesDB" using a SQL query.

```
-- 2) (2 Marks) Create "SalesDB" if it doesn't exist before retrieving file details
IF NOT EXISTS (SELECT name FROM sys.databases WHERE name = 'SalesDB')
    CREATE DATABASE SalesDB;
GO
```

100 %

Messages

```
Commands completed successfully.

Completion time: 2025-03-25T09:50:48.0502684+05:30
```

```
-- Identify the physical database files (MDF, LDF) for "SalesDB"
SELECT name, physical_name, type_desc
FROM sys.master_files
WHERE database_id = DB_ID('SalesDB');
```

100 %

Results | Messages

	name	physical_name	type_desc
1	SalesDB	C:\Program Files\Microsoft SQL Server\MSSQL16.NIS...	ROWS
2	SalesDB_log	C:\Program Files\Microsoft SQL Server\MSSQL16.NIS...	LOG

3) (2 Marks) Create a user-defined database named "InventoryDB" with a primary data file of 5MB and a log file of 2MB.

SQLQuery1.sql - NI...NTHINI\nisha (67))*

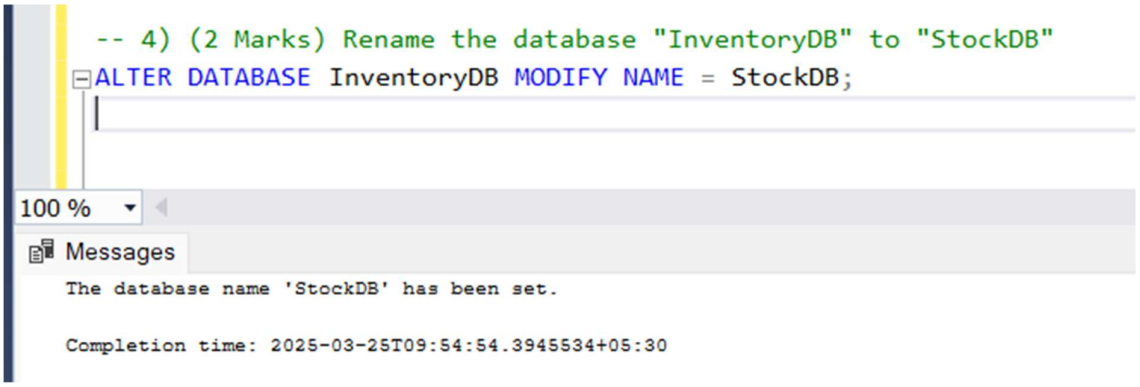
```
-- 3) (2 Marks) Create a user-defined database named "InventoryDB" with a primary data file of 5MB and a log file of 2MB
CREATE DATABASE InventoryDB
ON PRIMARY (NAME = 'InventoryDB_Data', FILENAME = 'C:\SQLData\InventoryDB.mdf', SIZE = 5MB)
LOG ON (NAME = 'InventoryDB_Log', FILENAME = 'C:\SQLData\InventoryDB.ldf', SIZE = 2MB);
```

100 %

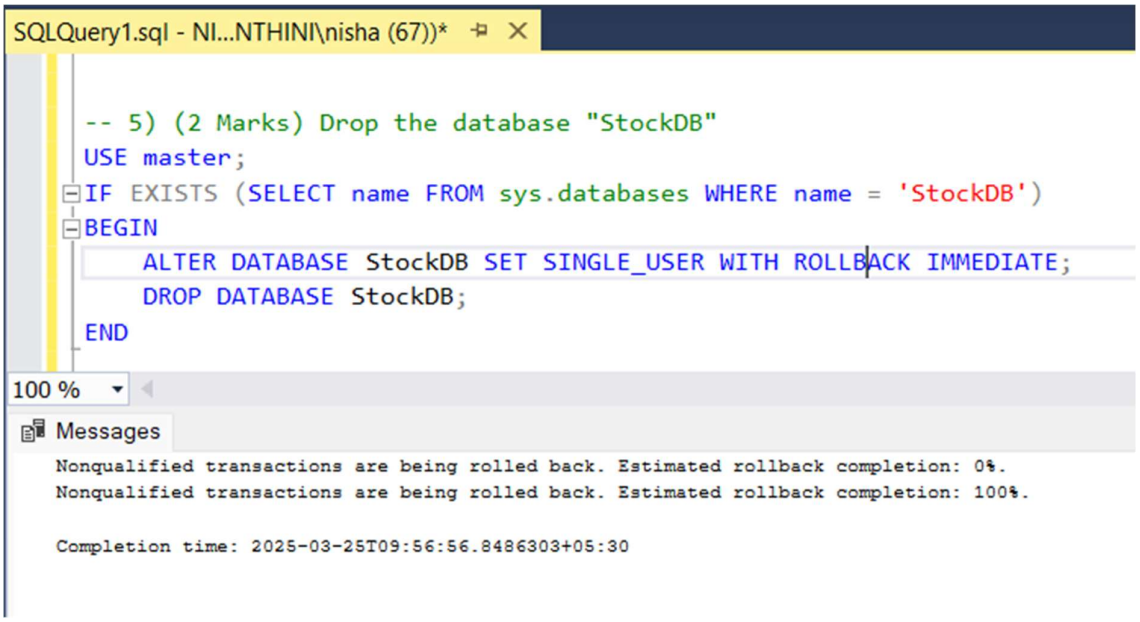
Results | Messages

	name	physical_name	type_desc
1	SalesDB	C:\Program Files\Microsoft SQL Server\MSSQL16.NIS...	ROWS
2	SalesDB_log	C:\Program Files\Microsoft SQL Server\MSSQL16.NIS...	LOG

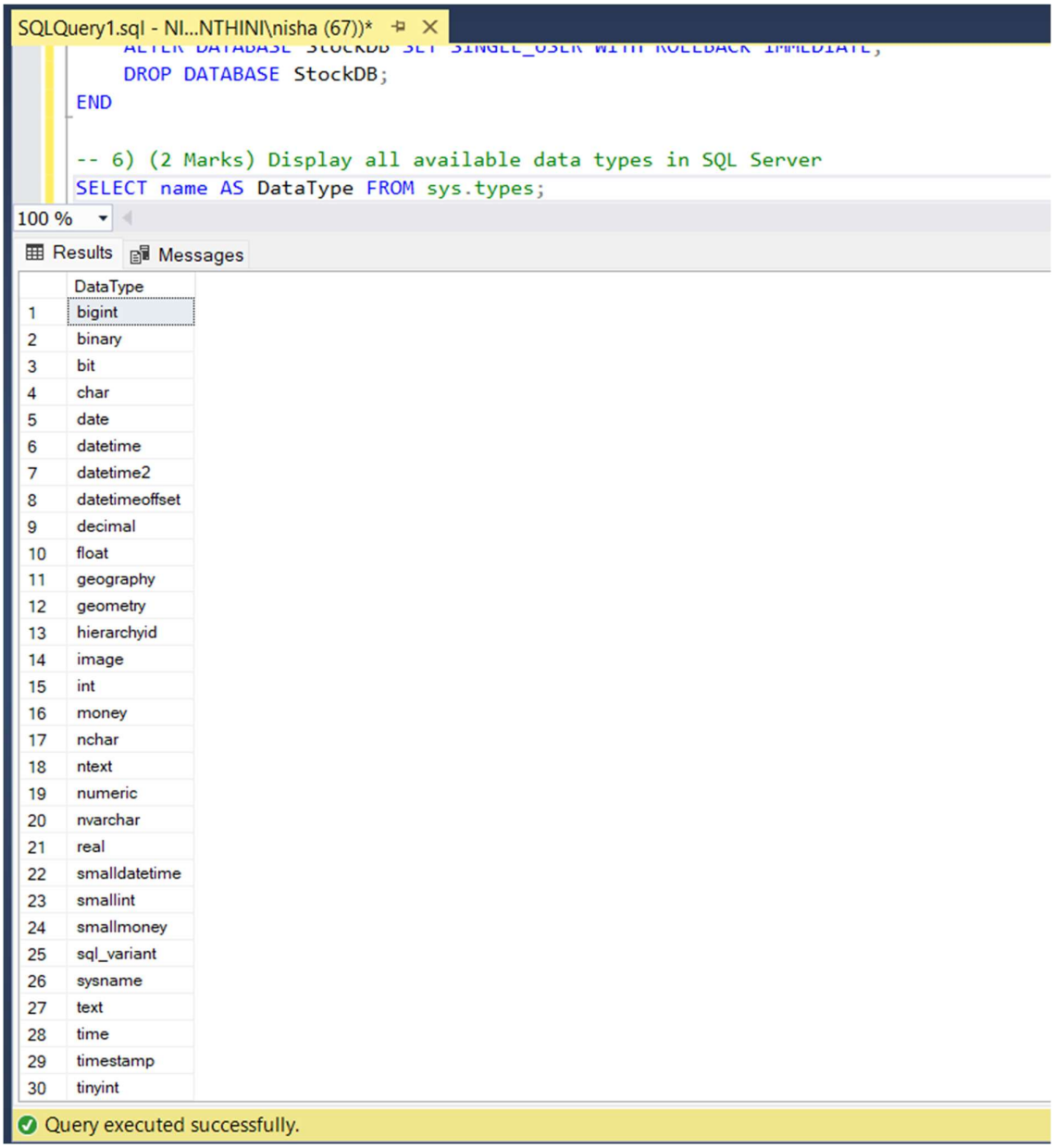
4) (2 Marks) Rename the database "InventoryDB" to "StockDB" using a SQL query.



5) (2 Marks) Drop the database "StockDB" using a SQL query.

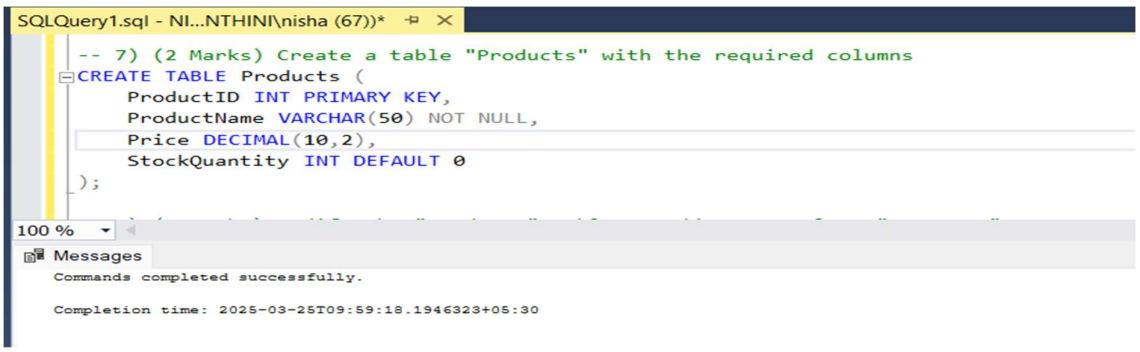


6) (2 Marks) Write a query to display all available data types in SQL Server.

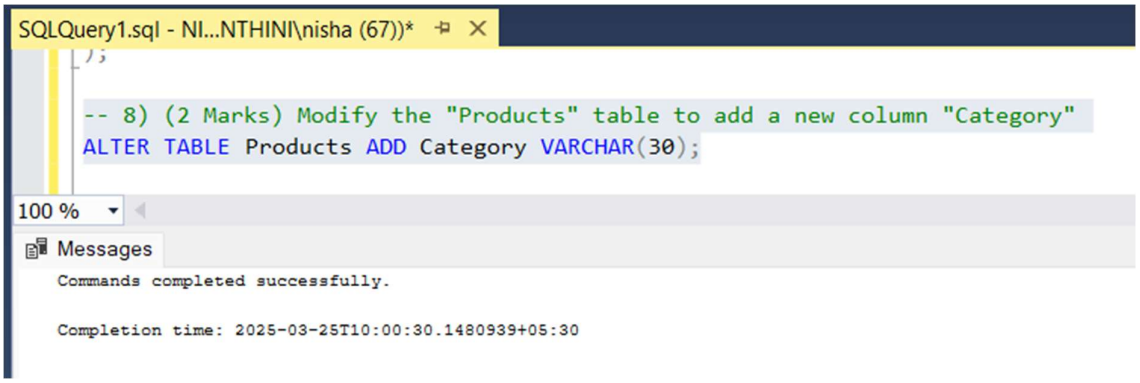


7) (2 Marks) Create a table "Products" with the following columns:

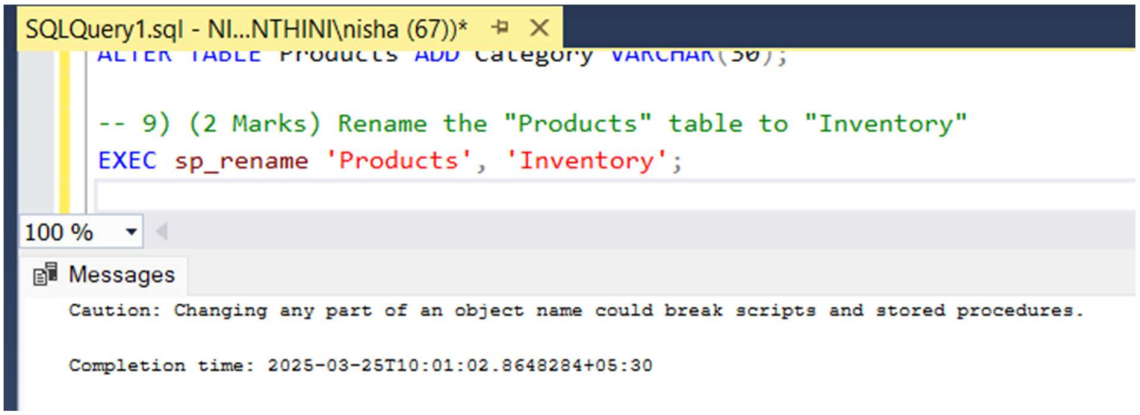
ProductID (Integer, Primary Key), ProductName (Variable-length string, max 50 characters, Not Null), Price (Decimal with 2 decimal places), StockQuantity (Integer, Default value 0)



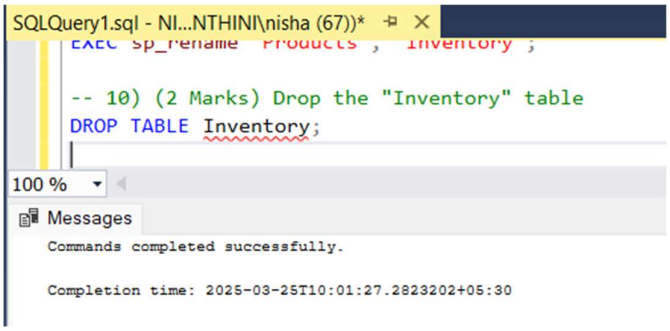
8)(2 Marks) Modify the "Products" table to add a new column Category (VARCHAR(30)).



9)(2 Marks) Rename the table "Products" to "Inventory".



10)(2 Marks) Drop the "Inventory" table from the database.



11)(5 Marks) Identify and list the system databases available in SQL Server. Provide a brief description of each.

SQLQuery1.sql - NI...NTHINI\nisha (67))*

```
DROP TABLE Inventory;

-- 11) (5 Marks) Identify and list system databases with a brief description
SELECT name AS DatabaseName, database_id, state_desc
FROM sys.databases;
```

100 %

Results | Messages

	DatabaseName	database_id	state_desc
1	master	1	ONLINE
2	tempdb	2	ONLINE
3	model	3	ONLINE
4	msdb	4	ONLINE
5	foundationtraining	5	ONLINE
6	training	6	ONLINE
7	TechShop	7	ONLINE
8	StudentRecords	8	ONLINE
9	ProjectManagement	9	ONLINE
10	EmployeeRecords	10	ONLINE
11	SalesDB	11	ONLINE

12)(5 Marks) Write a query to display all database files (MDF, LDF, NDF) for a specific database.

SQLQuery1.sql - NI...NTHINI\nisha (67))*

```
-- 12) (5 Marks) Display all database files (MDF, LDF, NDF) for a specific database
SELECT name, type_desc, physical_name
FROM sys.master_files
WHERE database_id = DB_ID('SalesDB');
```

100 %

Results | Messages

	name	type_desc	physical_name
1	SalesDB	ROWS	C:\Program Files\Microsoft SQL Server\MSSQL16.NIS...
2	SalesDB_log	LOG	C:\Program Files\Microsoft SQL Server\MSSQL16.NIS...

13) (5 Marks) Create a new user-defined database named SalesDB with a primary data file of 10MB and a log file of 5MB.

SQLQuery1.sql - NI...NTHINI\nisha (67))*

```
-- 13) (5 Marks) Create "SalesDB" with a 10MB primary file and 5MB log file
IF NOT EXISTS (SELECT name FROM sys.databases WHERE name = 'SalesDB')
    CREATE DATABASE SalesDB
    ON PRIMARY (NAME = 'SalesDB_Data', FILENAME = 'C:\SQLData\SalesDB.mdf', SIZE = 10MB)
    LOG ON (NAME = 'SalesDB_Log', FILENAME = 'C:\SQLData\SalesDB.ldf', SIZE = 5MB);
GO
```

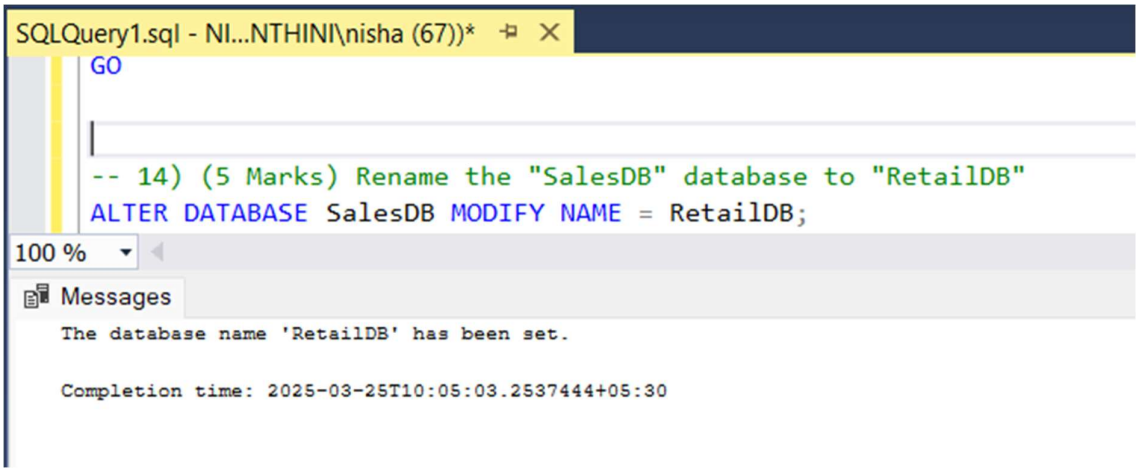
100 %

Messages

```
Commands completed successfully.

Completion time: 2025-03-25T10:04:34.4726091+05:30
```

14)(5 Marks) Rename the database SalesDB to RetailDB using an SQL query.



15) (5 Marks) Drop the RetailDB database safely, ensuring that no active connections exist before deletion.