DBMS ASSIGNMENT

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19BCS030

4) Illustrate Logical operators except ANY, ALL and Like (2 queries for each operator)

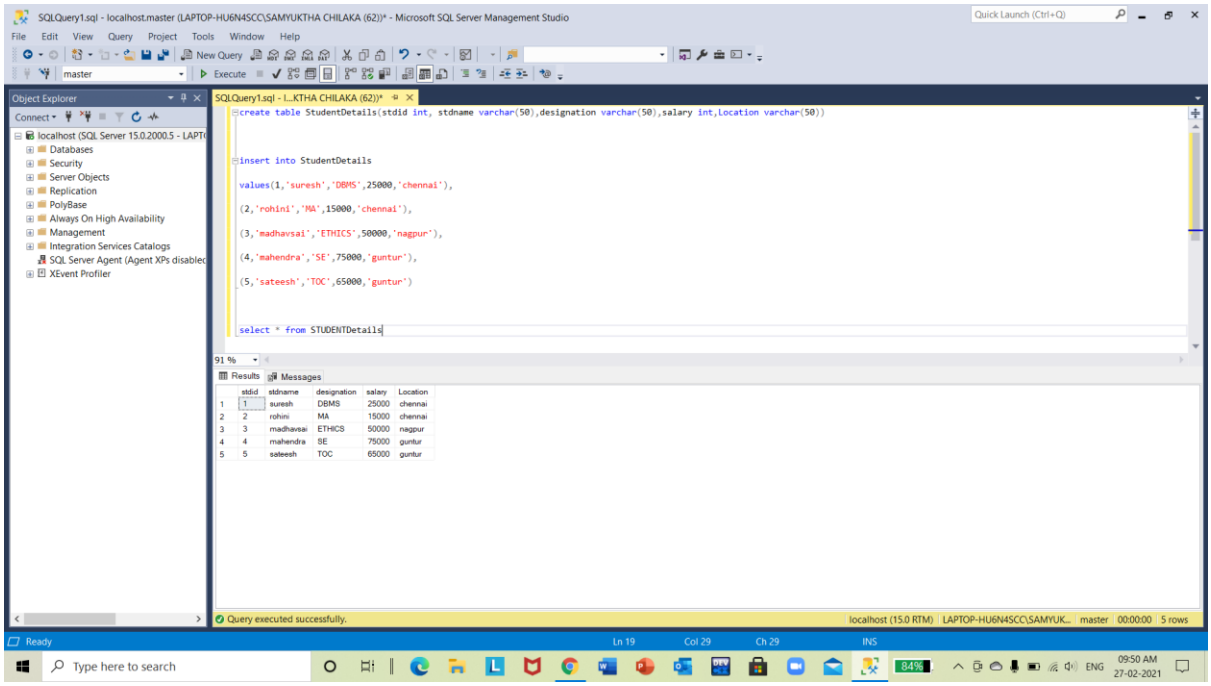
a) SQL AND Operator

Following is the syntax of defining an AND operator in SQL statements.

SELECT column1, column2 FROM tablename WHERE column1 ='Somevalue' AND column2='Some

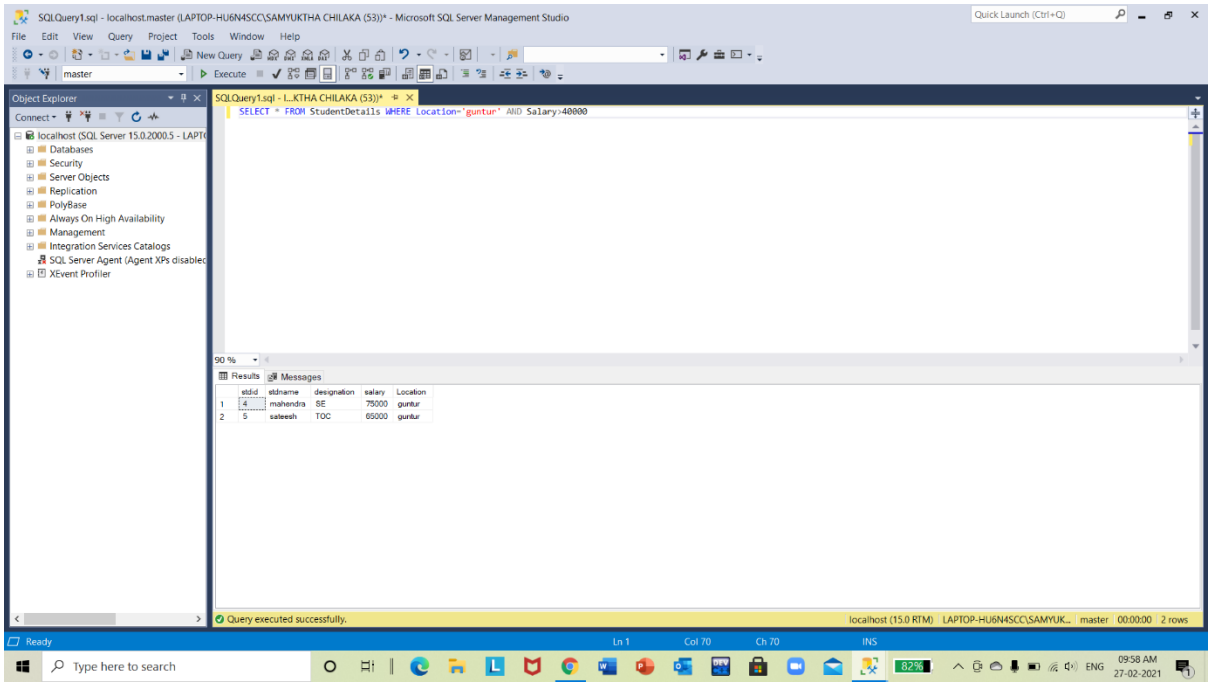
value'

We will check this with the example for that first create "**StudentDetails**" table by using the following script in the SQL database.



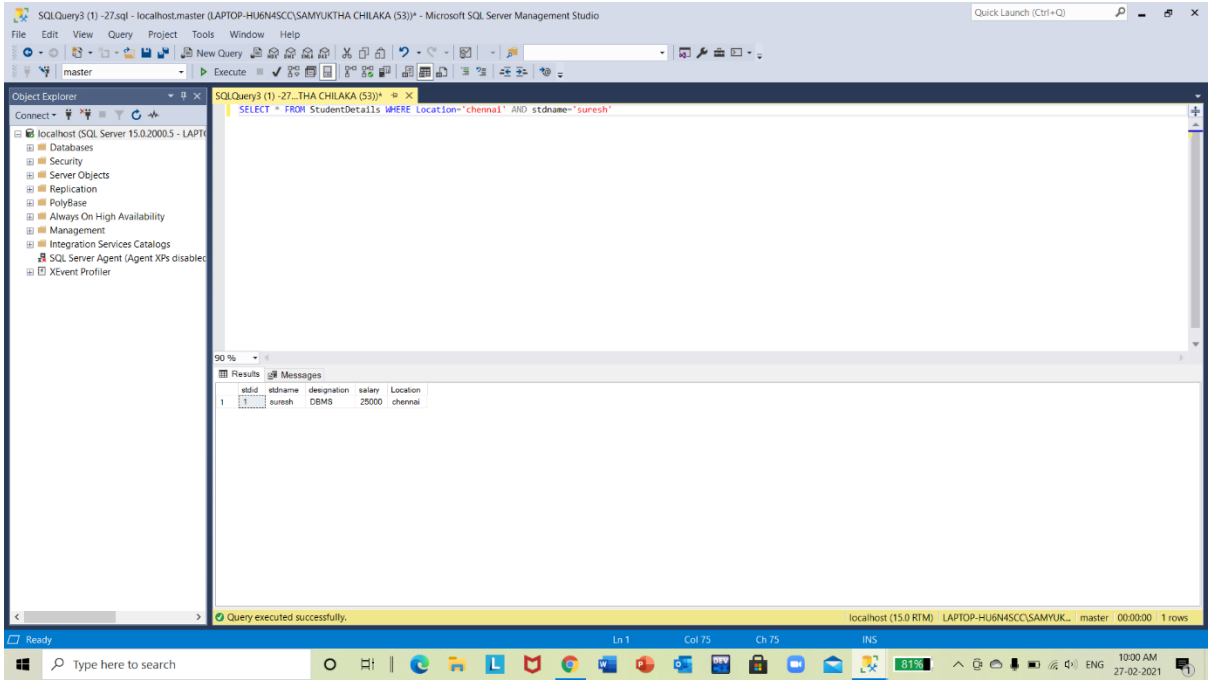
QUERY-1

In the following SQL query, we are checking multiple conditions (**Location**, **Salary**) with **AND** operator. It will return records whatever it satisfies both the conditions



QUERY-2

In the following SQL query, we are checking **Location** and **stdname** conditions with **AND** operator



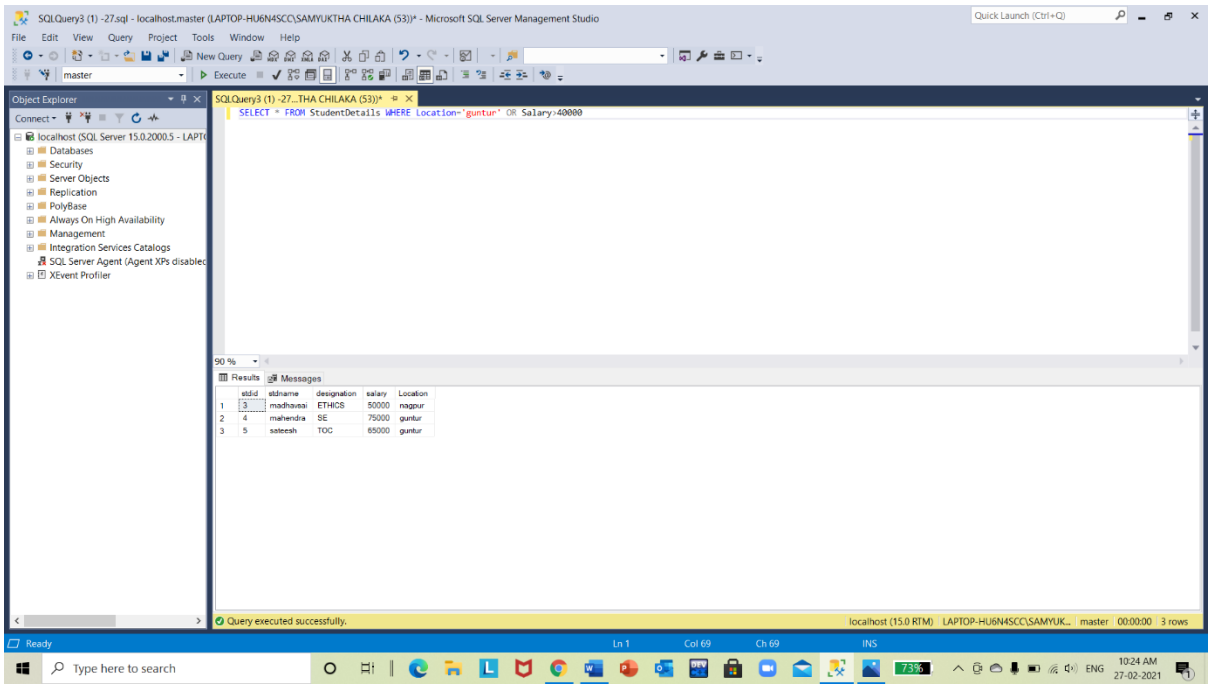
. It will return records whatever it satisfies the defined conditions.

b) SQL OR OPERATOR

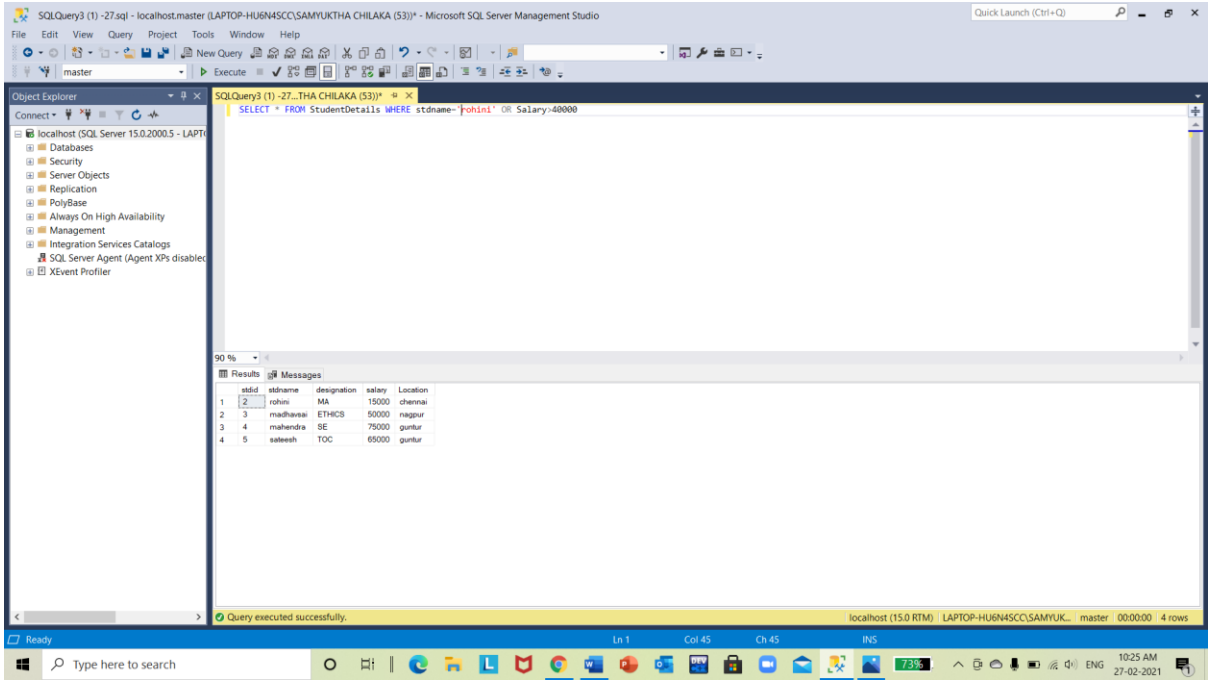
Following is the syntax of defining an OR operator in the SQL server.

SELECT column1, column2 FROM tablename WHERE column1 ='somevalue' OR column2='Somevalue'

QUERY-1



QUERY-2

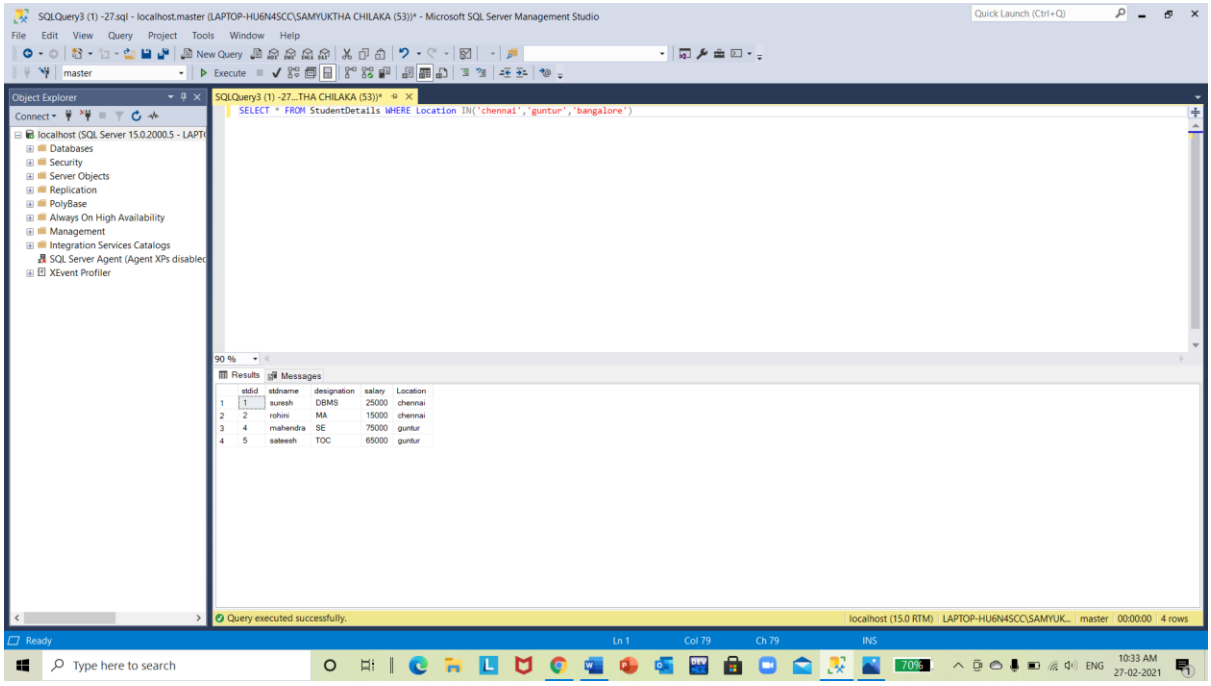


c) SQL IN OPERATOR

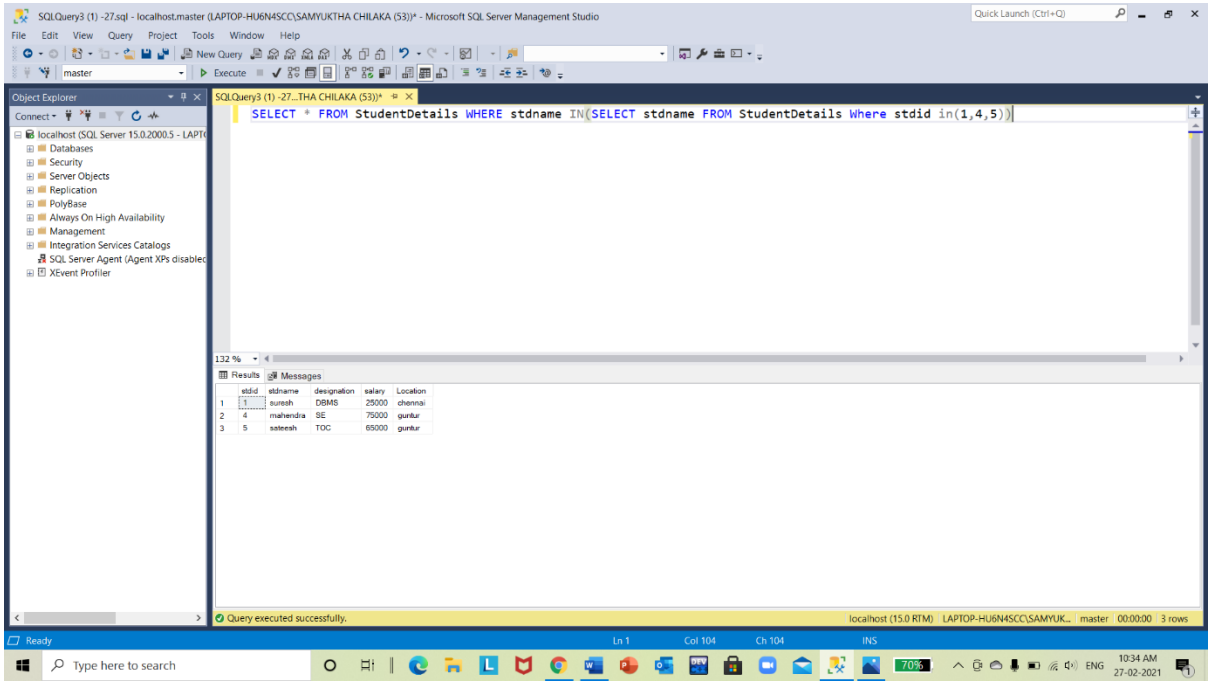
Following is the syntax of IN operator in the SQL server.

SELECT column1, column2 FROM tablename WHERE column1 IN ('value1','value2','value3')

QUERY-1



QUERY-2

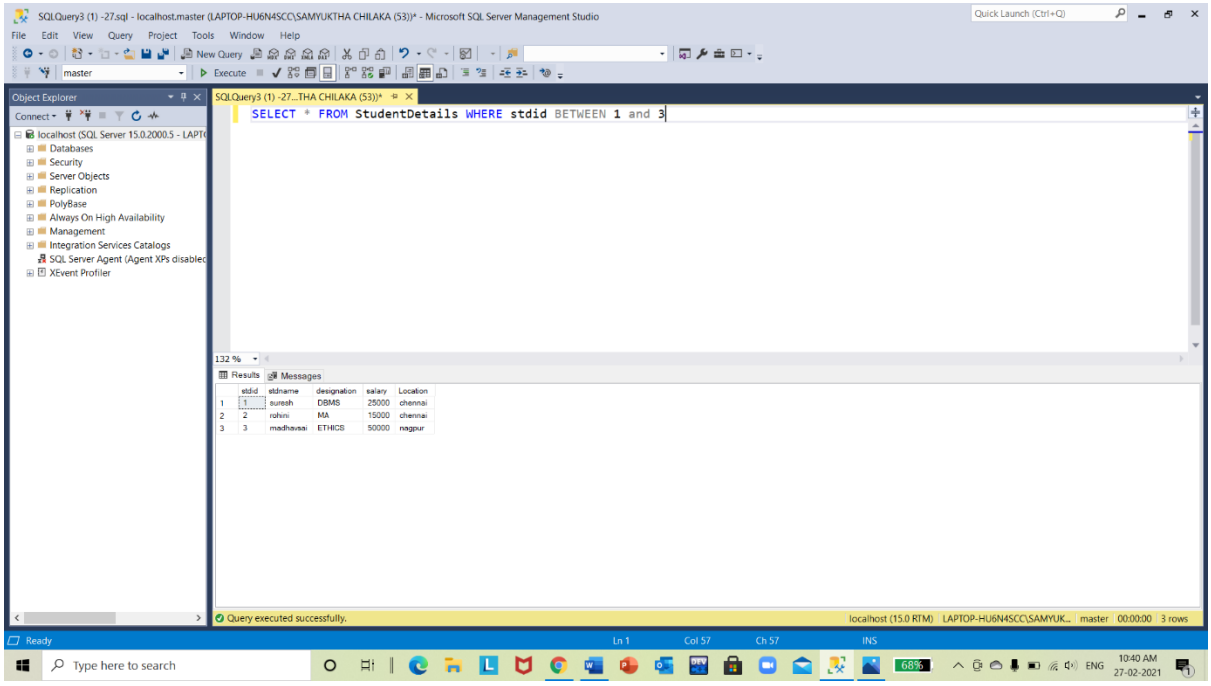


d) SQL BETWEEN OPERATOR

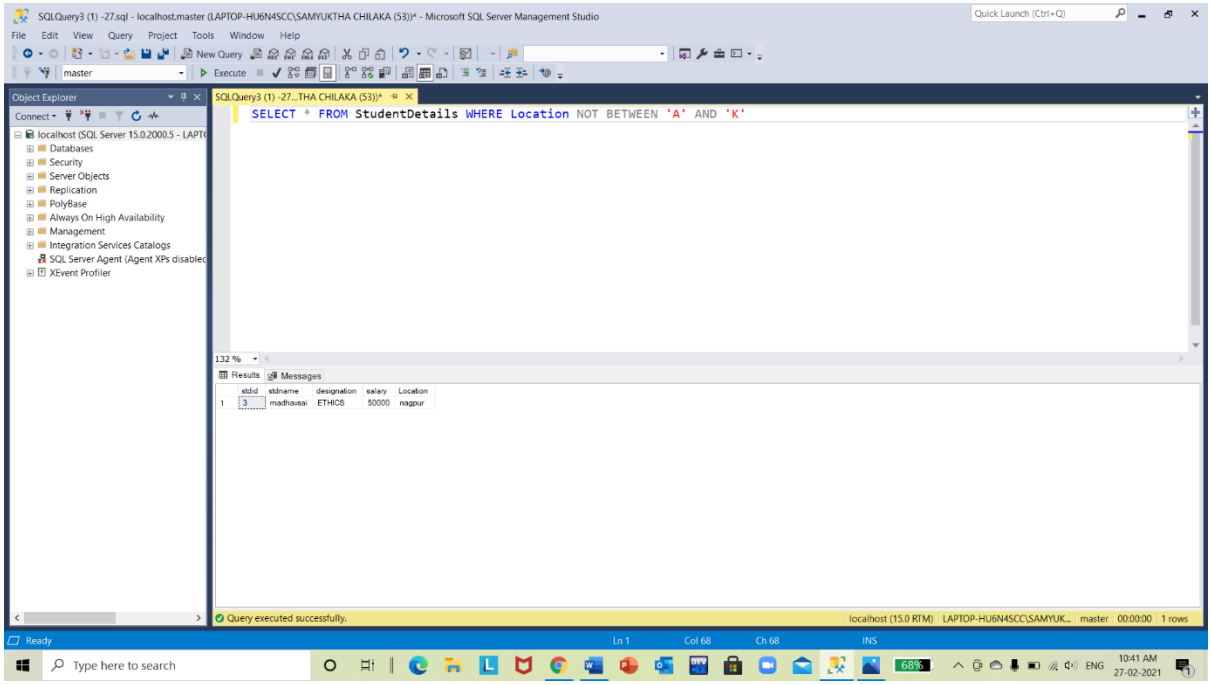
Following is the syntax of between operator in the SQL server.

SELECT column1, column2 FROM tablename WHERE column1 BETWEEN v alue1 AND value2

QUERY-1



QUERY-2

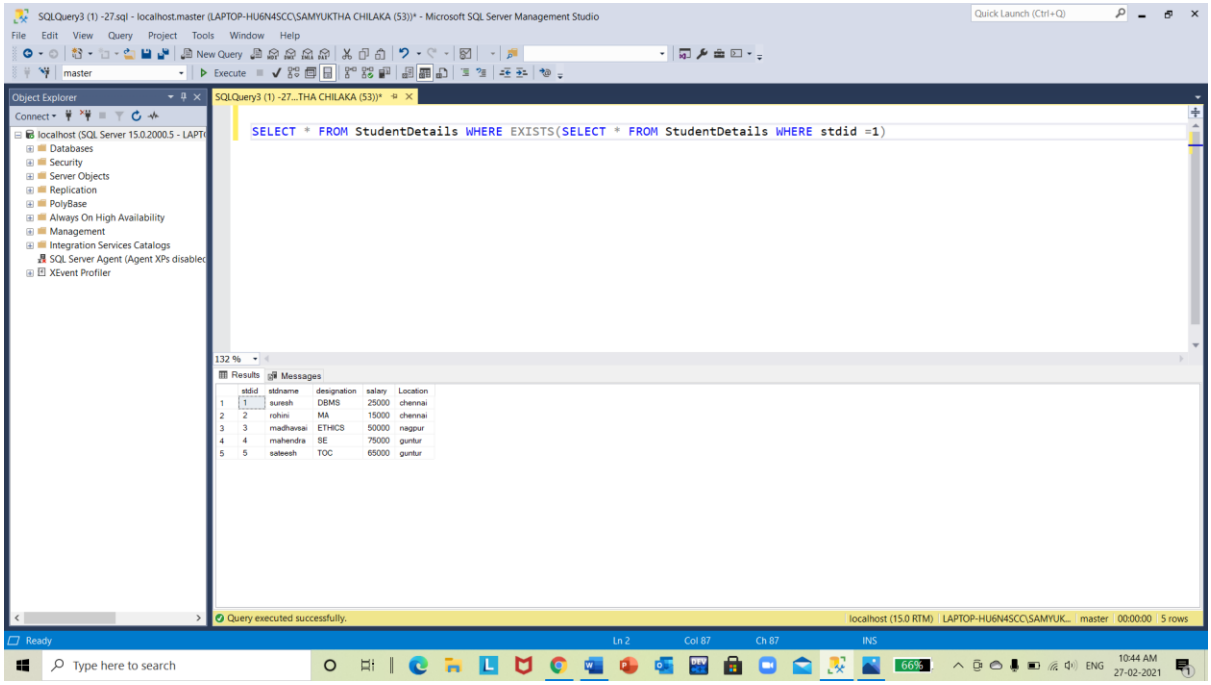


e) SQL EXISTS OPERATOR

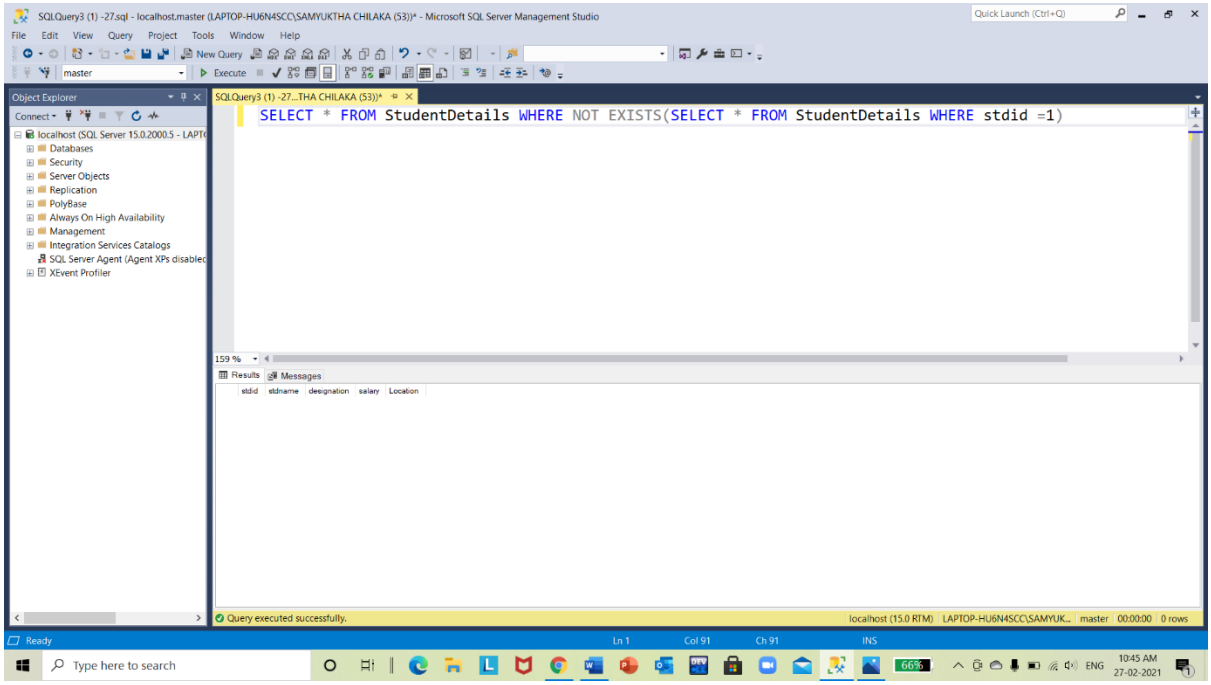
Following is the syntax of exists operator in the SQL server.

SELECT column1, column2 FROM tablename WHERE EXISTS(Subquery)

QUERY-1



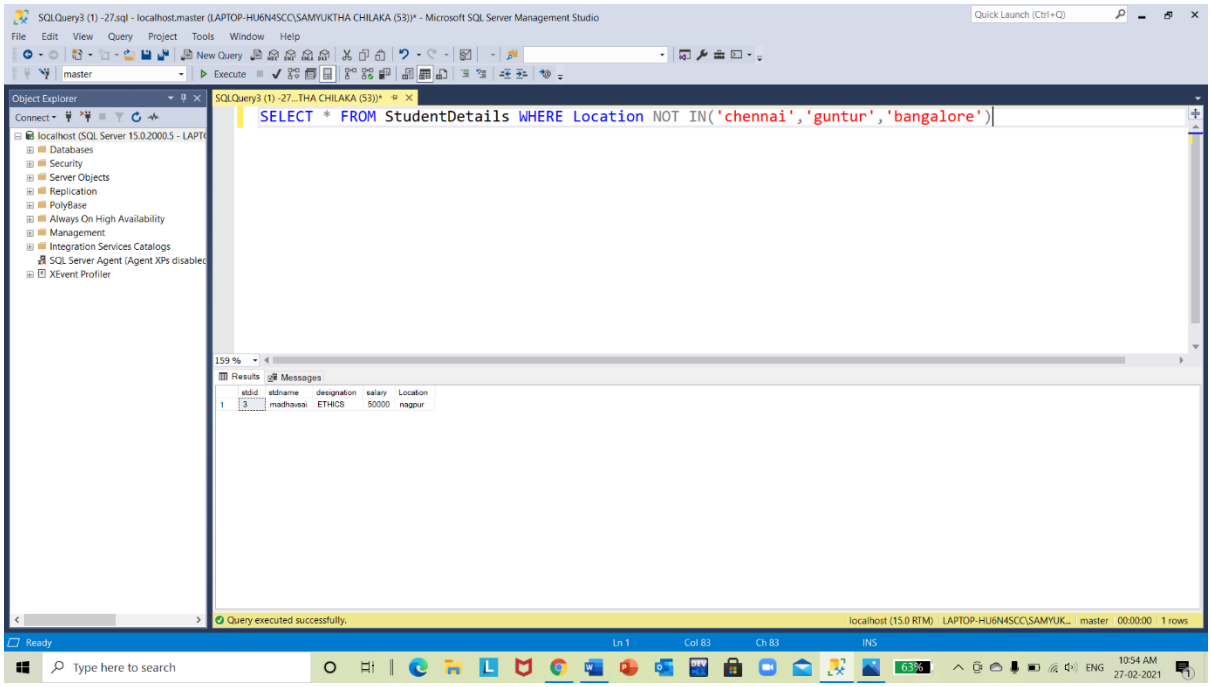
QUERY-2



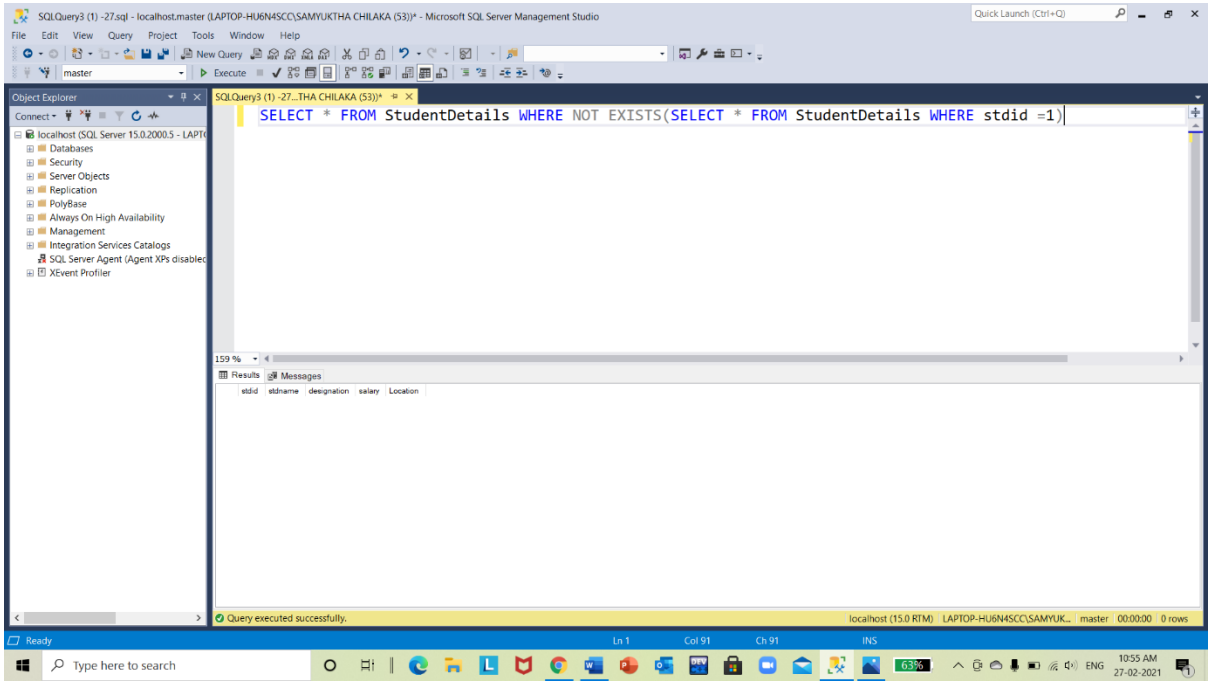
f) SQL NOT OPERATOR

In SQL, **NOT** operator is a negate operator that means it will return a result as just opposite for the defined conditions in SQL statements

QUERY-1



QUERY-2

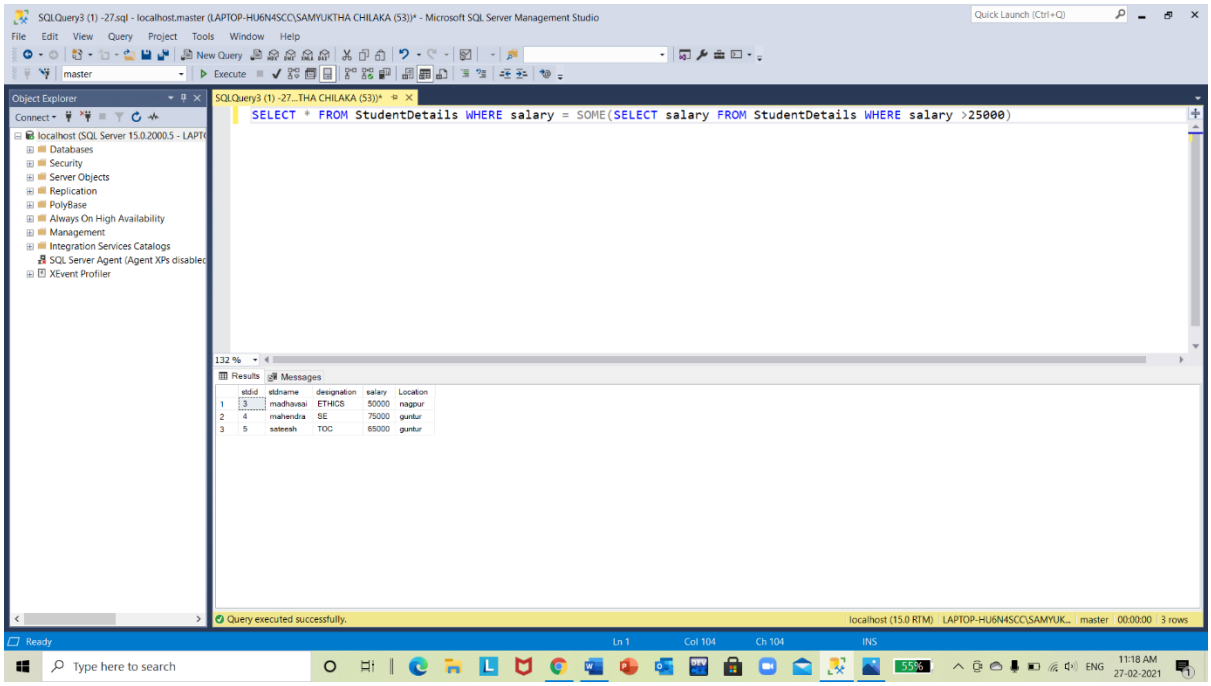


g) SQL SOME OPERATOR

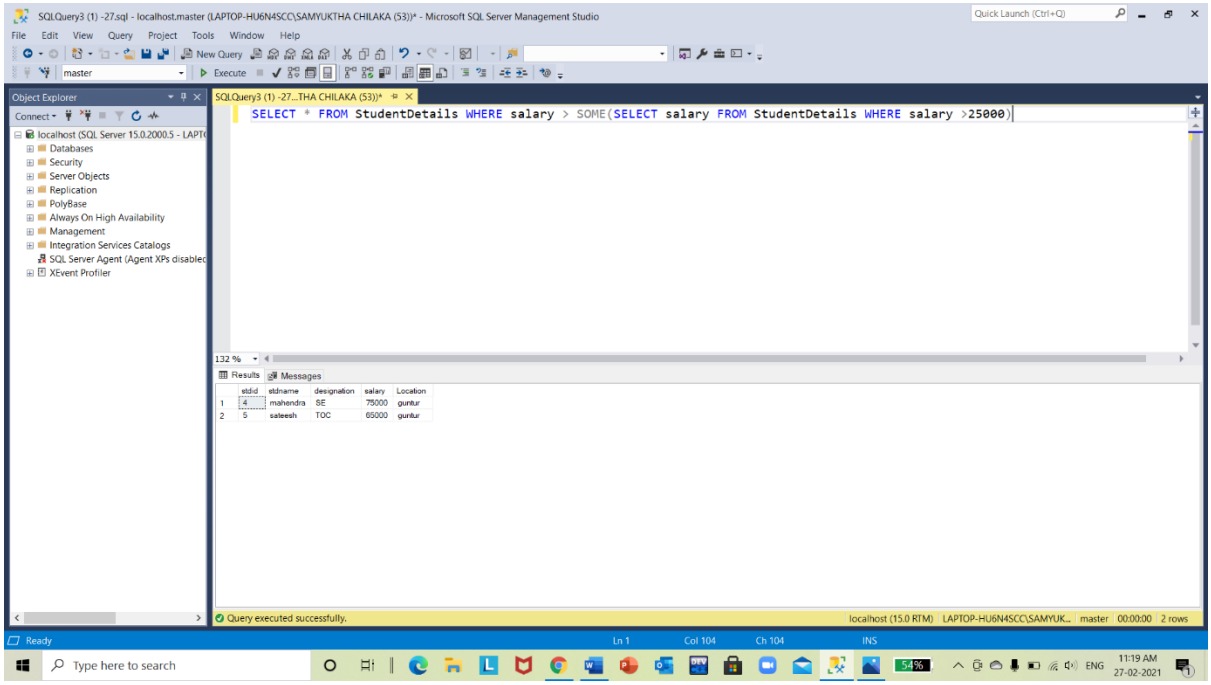
Following is the syntax of using a “some” operator in the SQL server.

SELECT column1,column2 FROM tablename WHERE column1 = SOME(SEL ECT column1 FROM tablename WHERE column1 ='somevalue')

QUERY-1



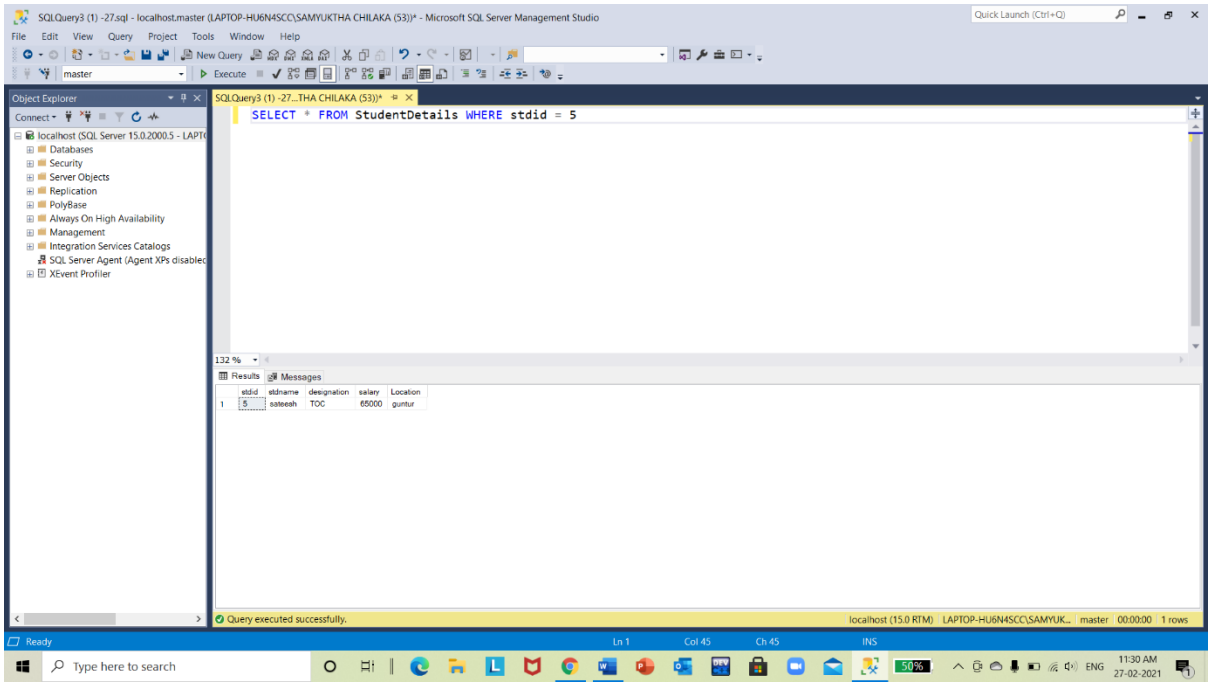
QUERY-2

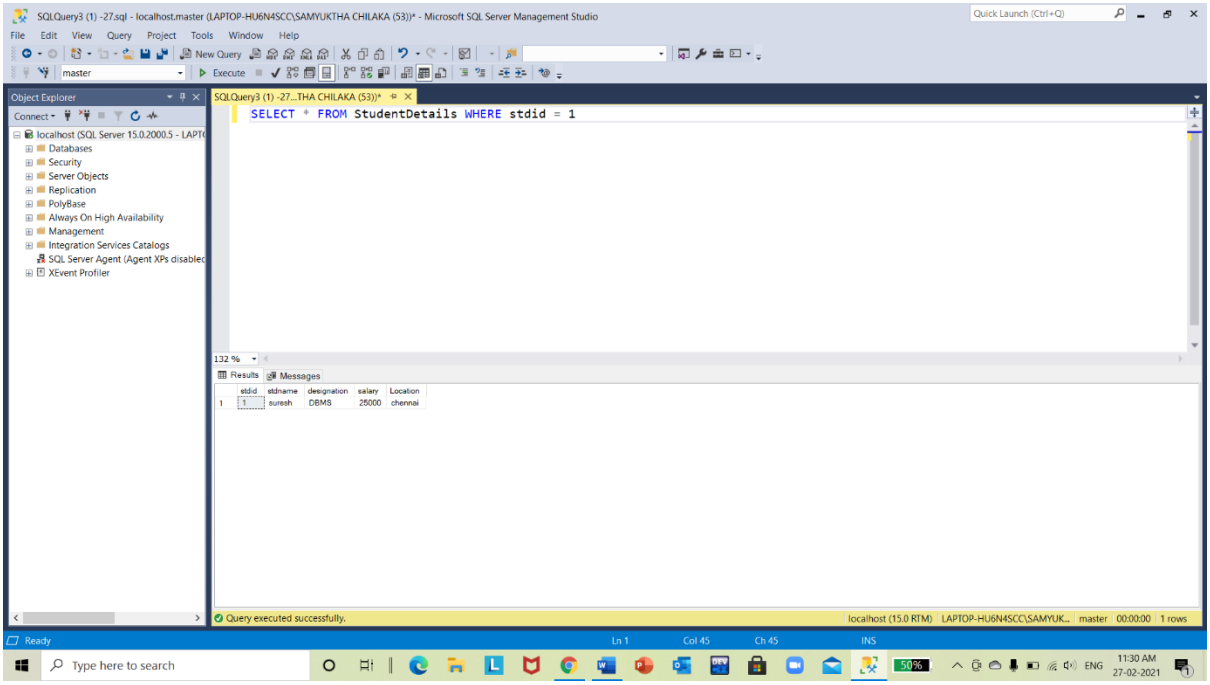


3) Illustrate all the Comparison operator (2 queries for each operator)

In SQL, the **comparison** operators are useful to compare one expression with another expression using mathematical operators like equal (=), greater than (>), less than (*), greater than or equal to (>=), less than or equal to (<=), not equal (<>), etc. on SQL statements.

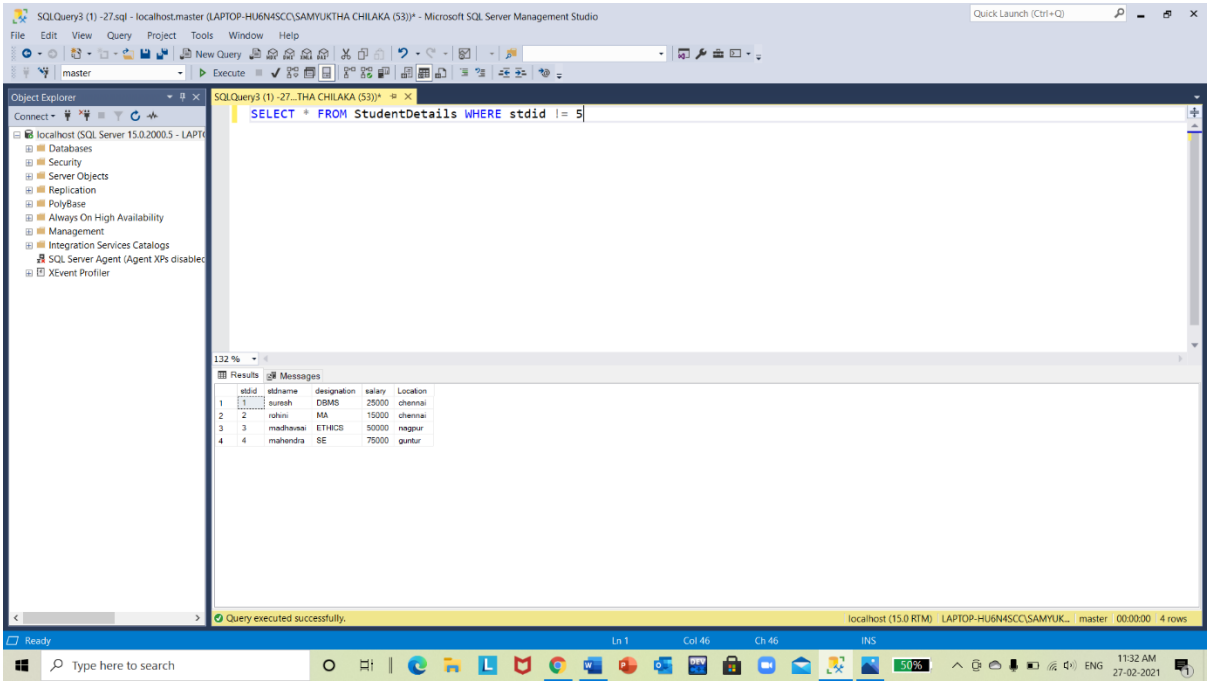
SQL EQUAL(=) OPERATOR: In SQL, the **equal** operator is useful to check whether the given two expressions equal or not. If it's equal, then the condition will be true and it will return matched records.

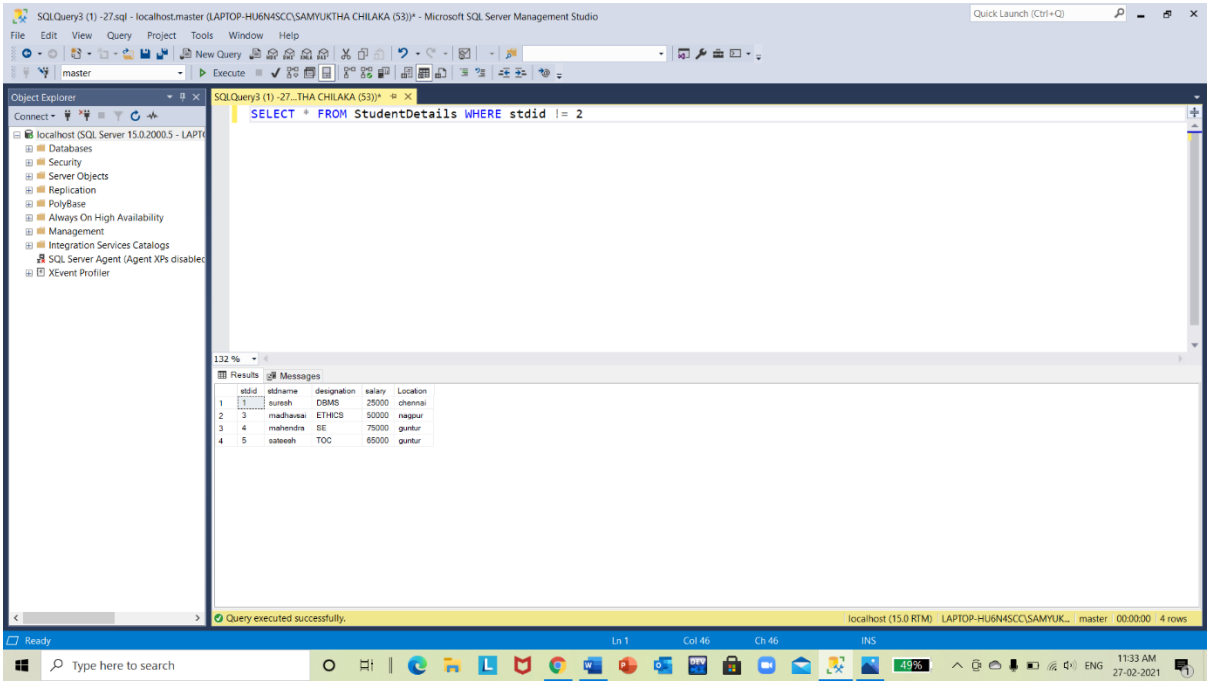




SQL Not Equal (!= or <>) Operator

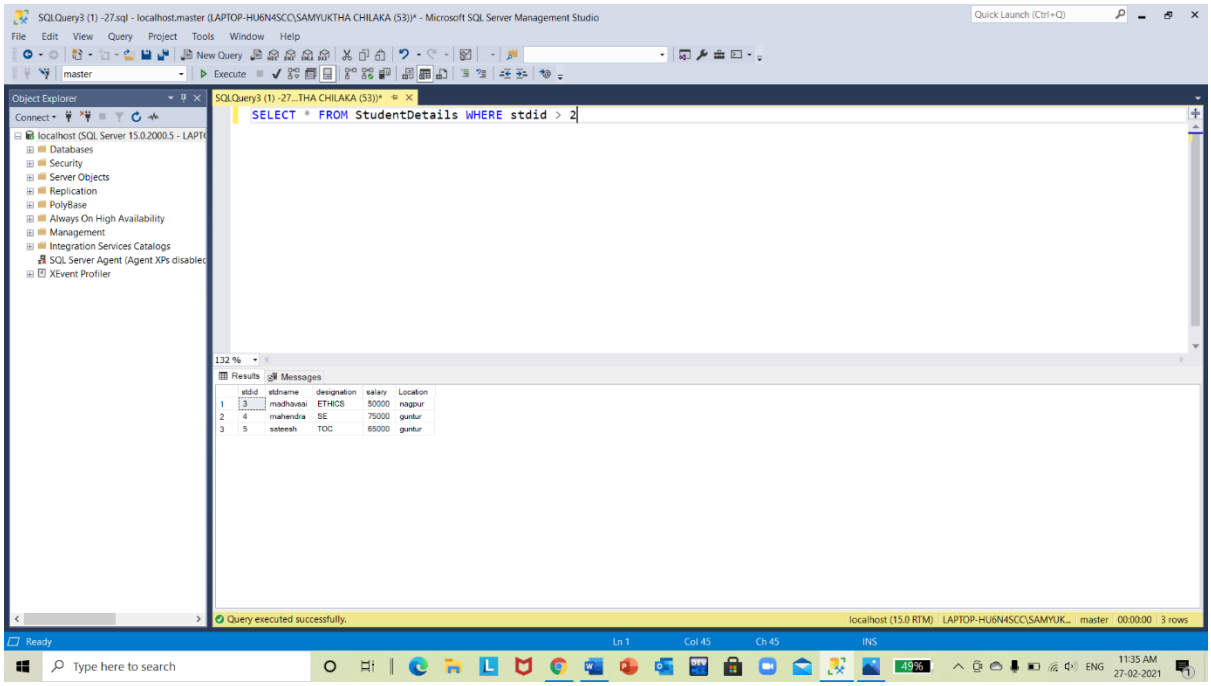
In SQL, **not equal** operator is used to check whether two expressions equal or not. If it's not equal then the condition will be true and it will return not matched records.

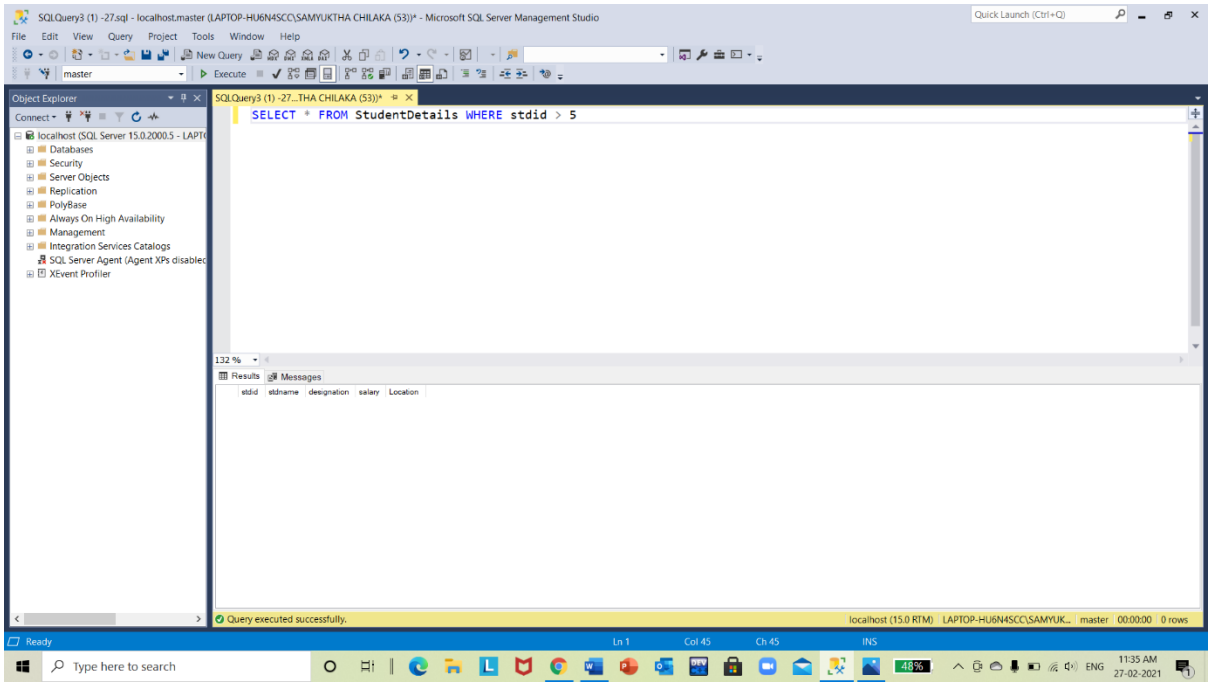




SQL Greater Than (>) Operator

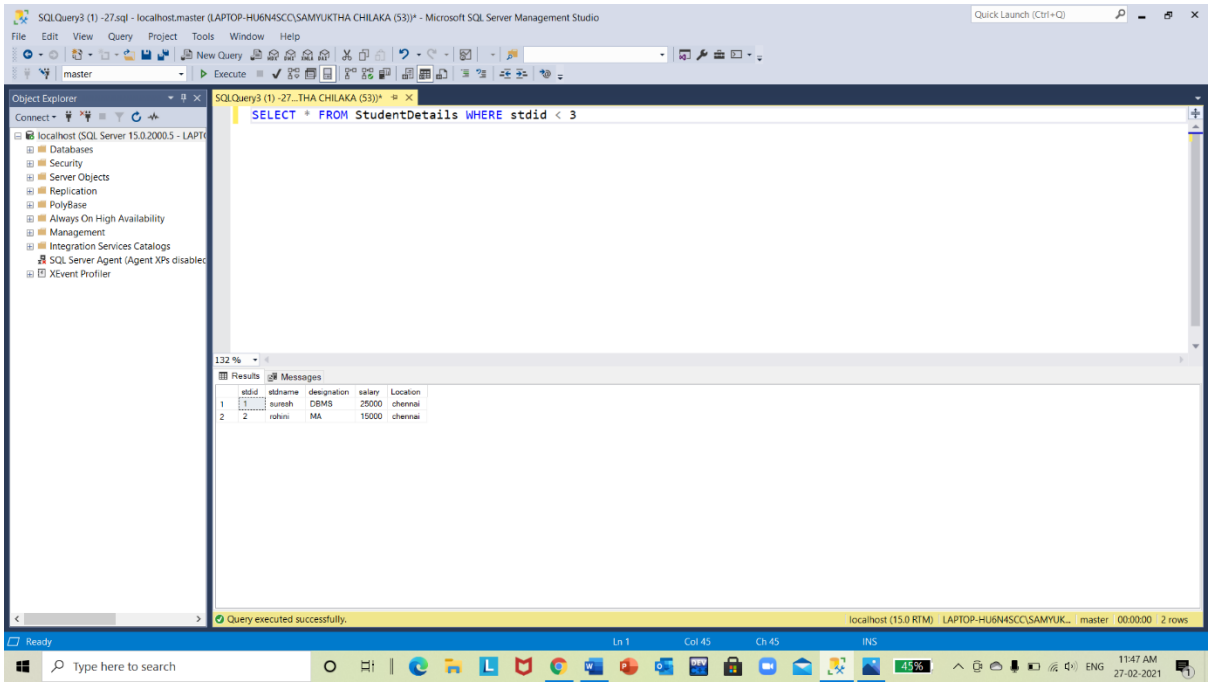
In SQL, **greater than** operator is used to check whether the left-hand operator is **higher than** the right-hand operator or not. If left-hand operator **higher than** right-hand operator then condition will be true and it will return matched records.

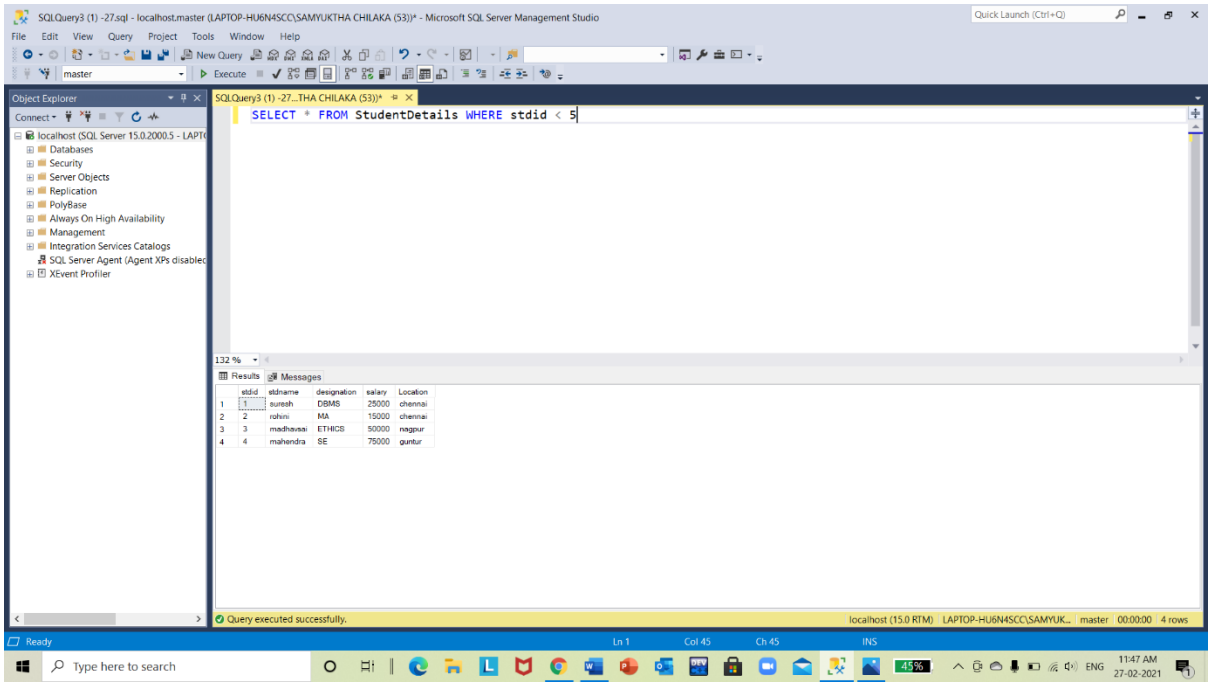




SQL Less Than (<) Operator

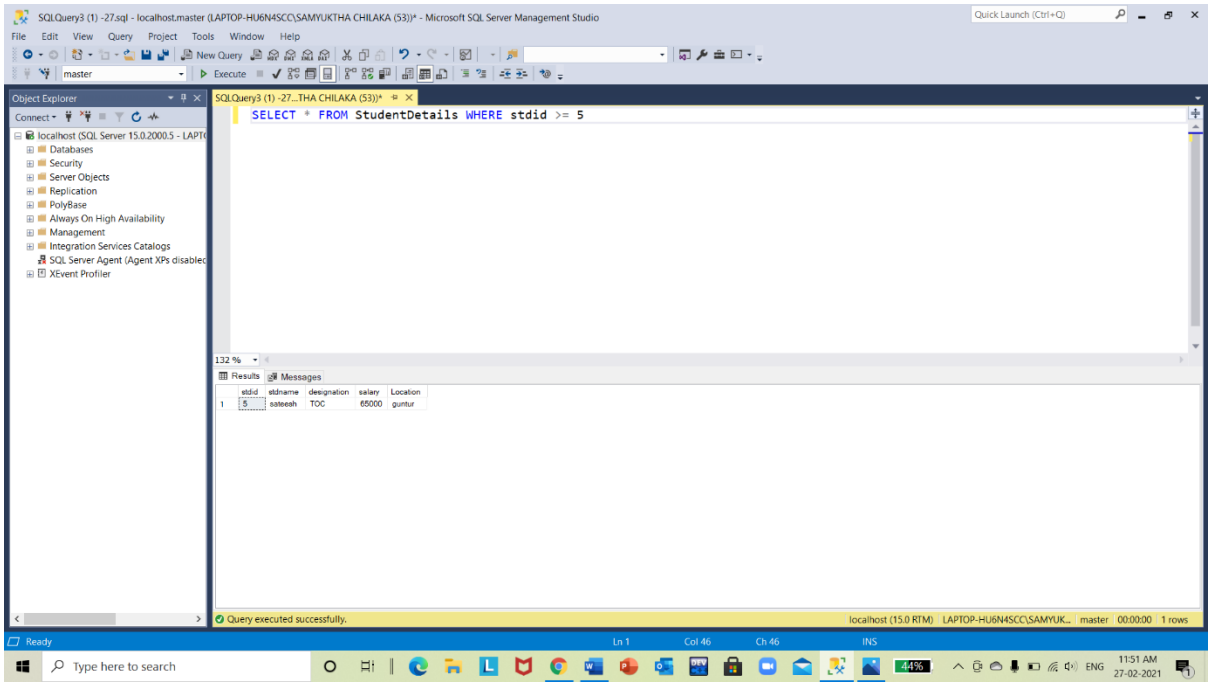
In SQL, **less than** operator is used to check whether the left-hand operator is **lower than** the right-hand operator or not. If left-hand operator **lower than** right-hand operator then condition will be true and it will return matched records.

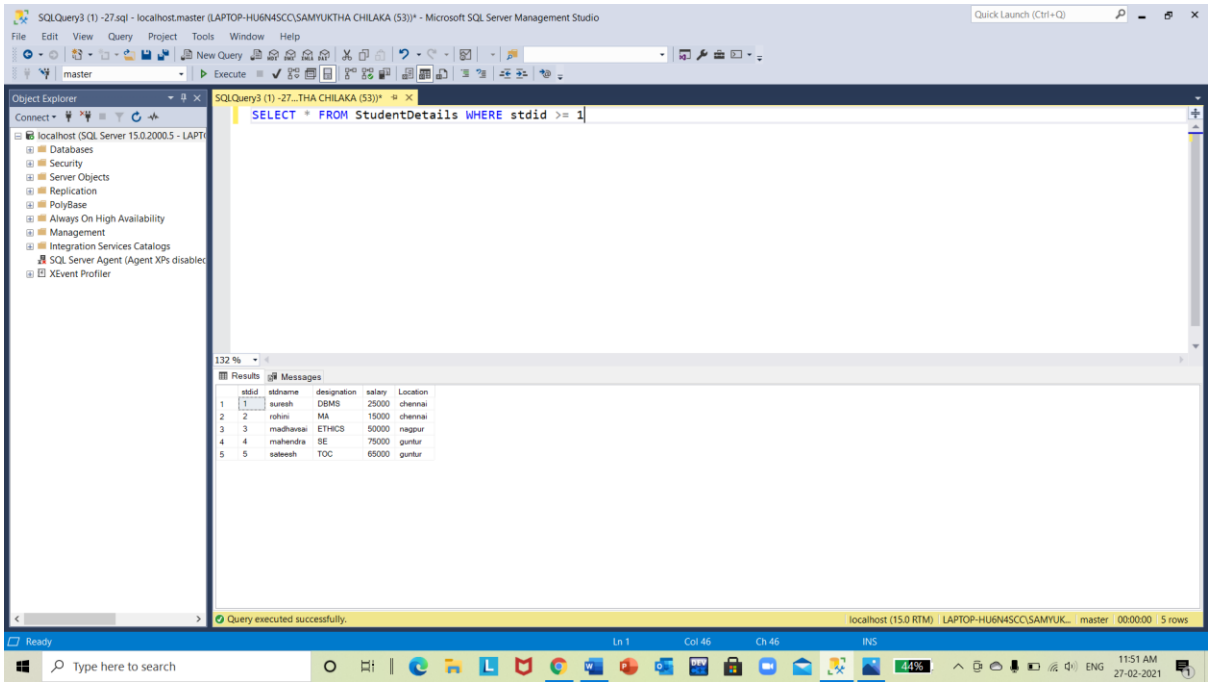




SQL Greater Than or Equal To (>=) Operator

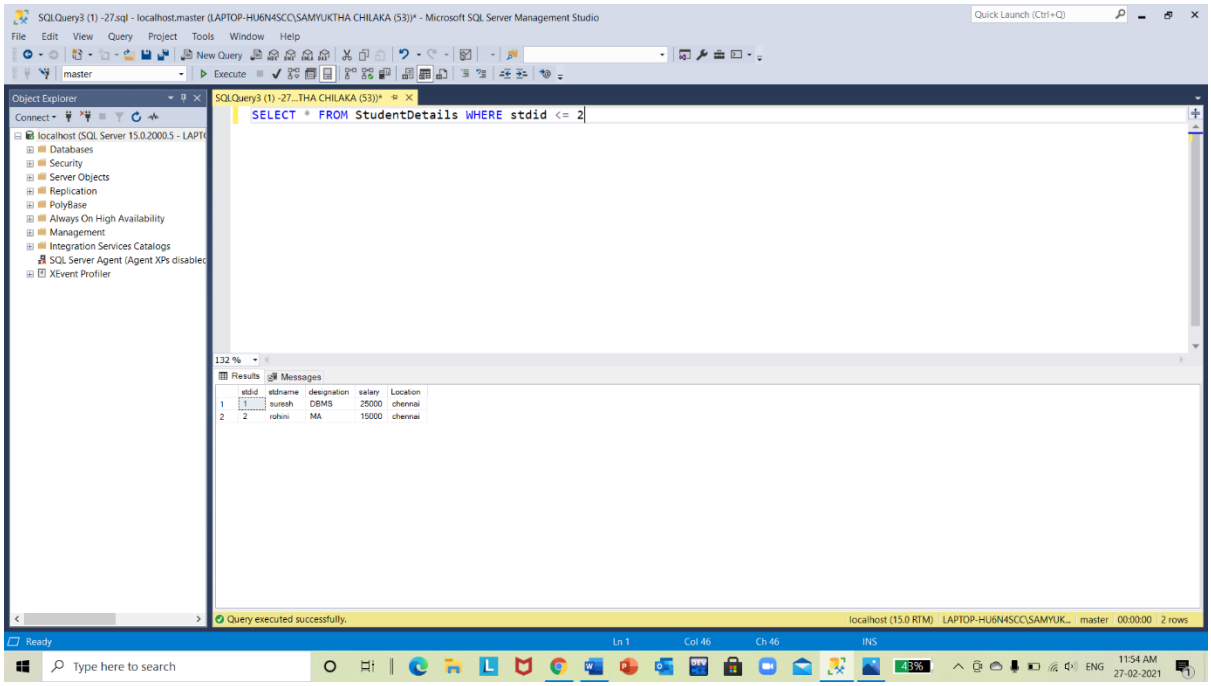
In SQL, **greater than or equal to** the operator is used to check whether the left-hand operator is **higher than or equal to** the right-hand operator or not. If left-hand operator **higher than or equal to** right-hand operator then condition will be true and it will return matched records.

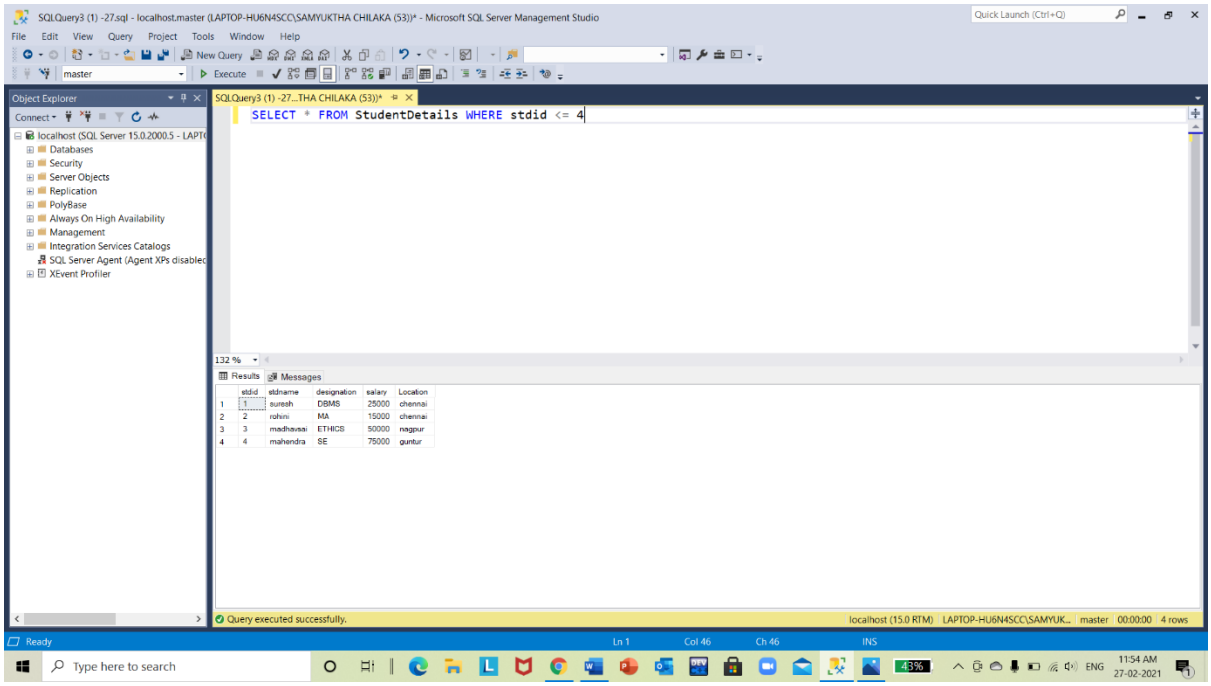




SQL Less Than or Equal To (<=) Operator

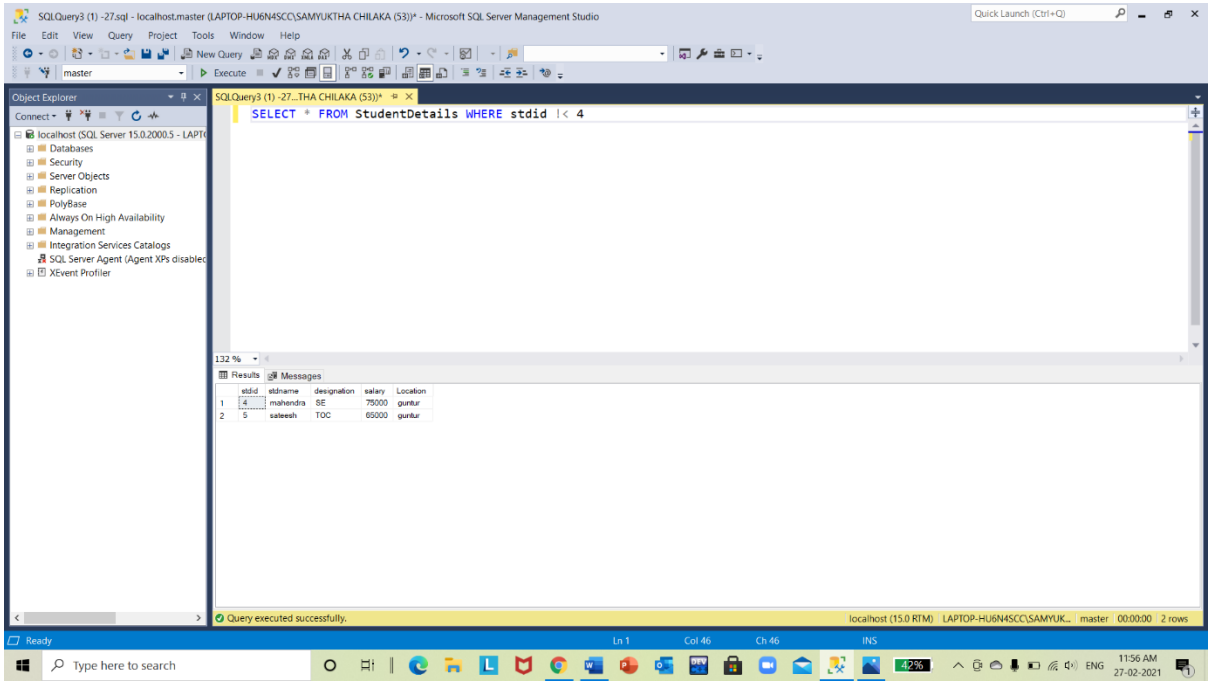
In SQL, **less than or equal to** the operator is useful to check whether the left-hand operator is lower than or equal to the right-hand operator or not. If left-hand operator lower than or equal to right-hand operator then condition will be true and it will return matched records.

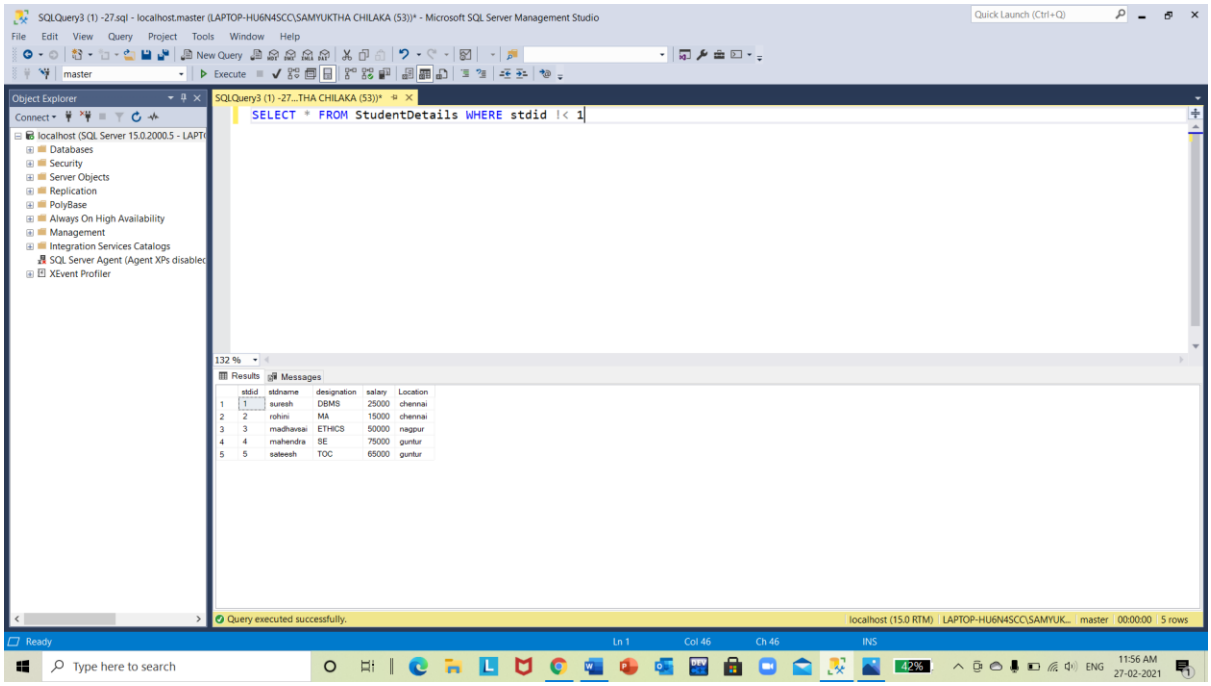




SQL Not Less Than (!<) Operator

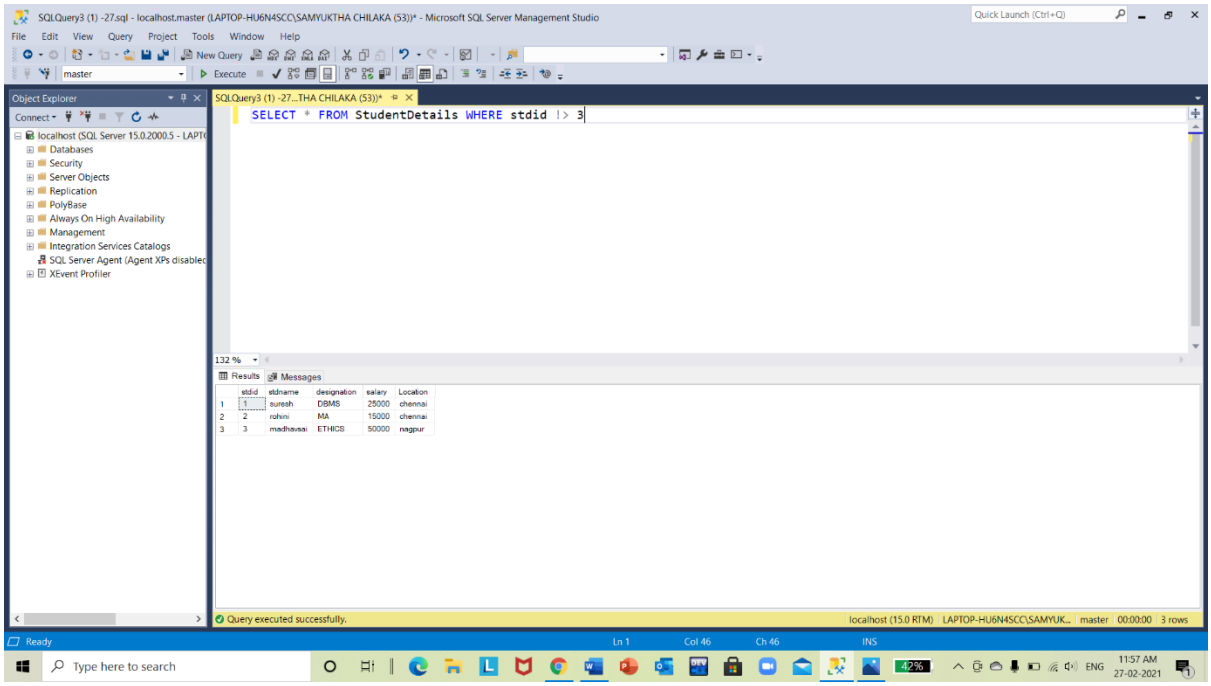
In sql, **not less than** operator is used to check whether the left-hand operator not lower than the right-hand operator or not. If left-hand operator not lower than right-hand operator then condition will be true and it will return matched records.

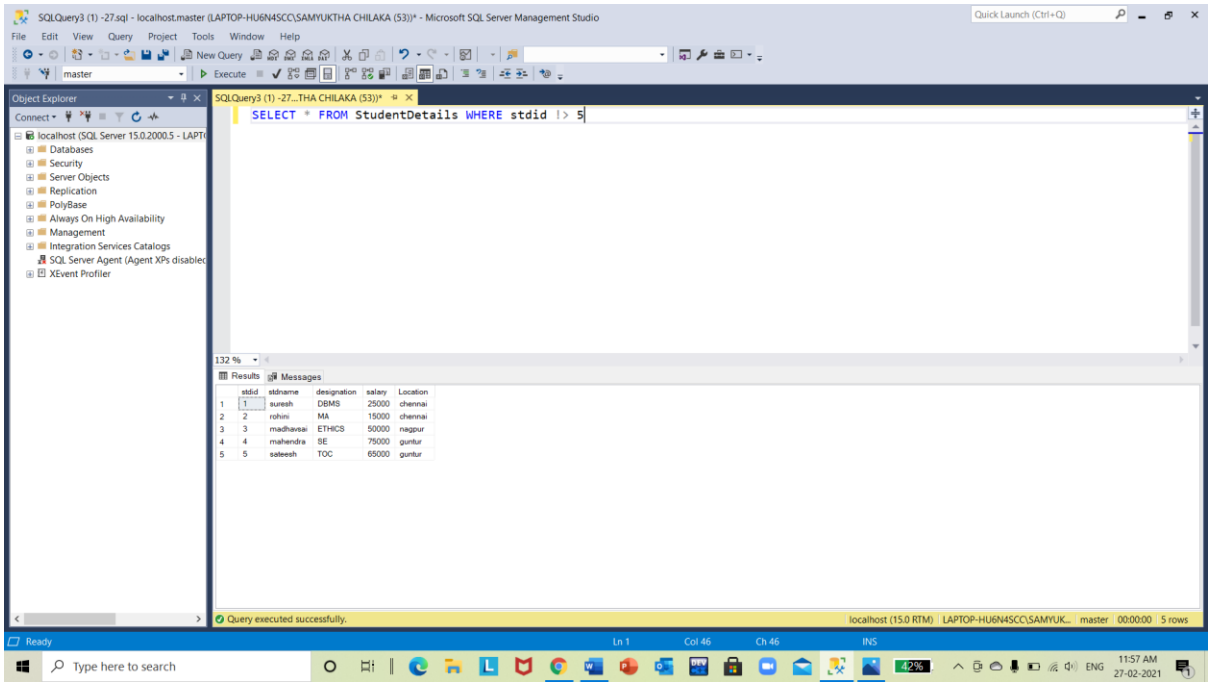




SQL Not Greater Than (!>) Operator

In sql, **not greater than** operator is used to check whether the left-hand operator is not higher than the right-hand operator or not. If left-hand operator not higher than right-hand operator then condition will be true and it will return matched records.

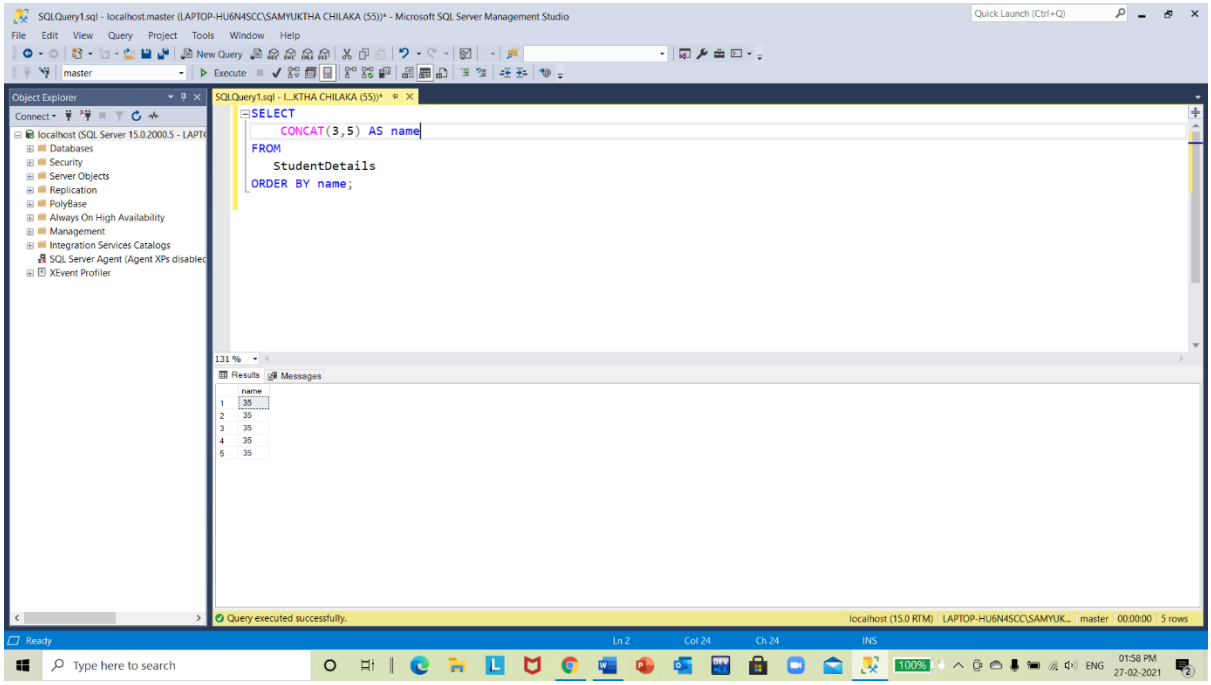


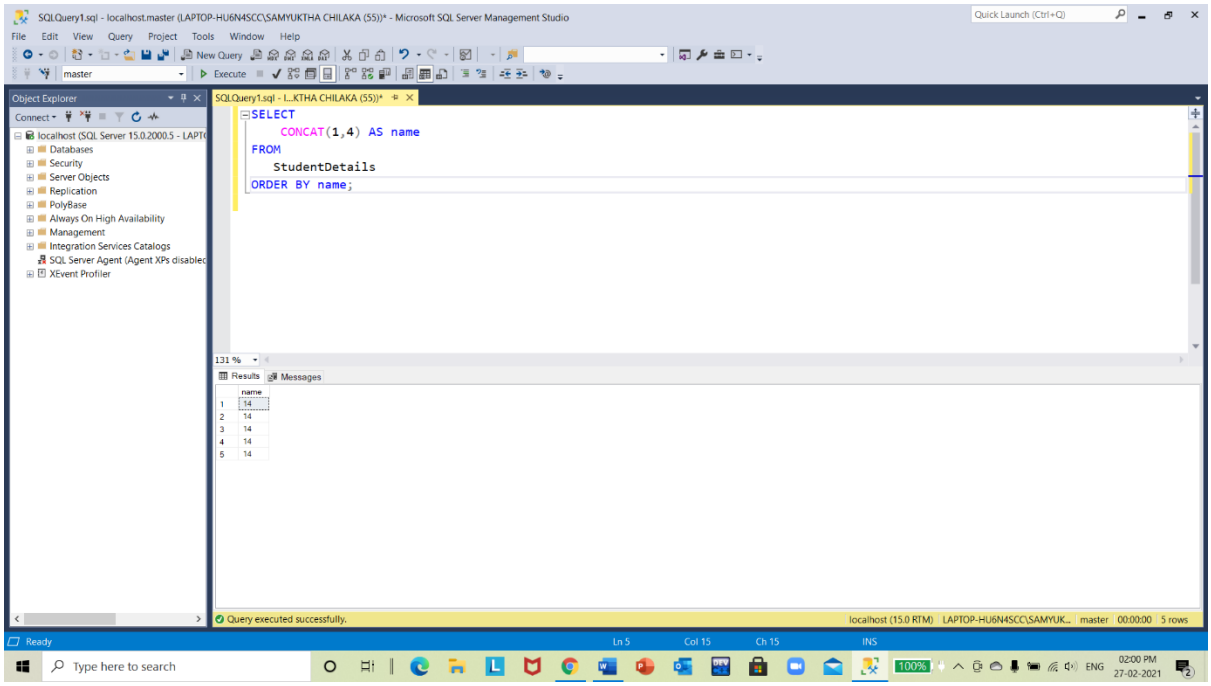


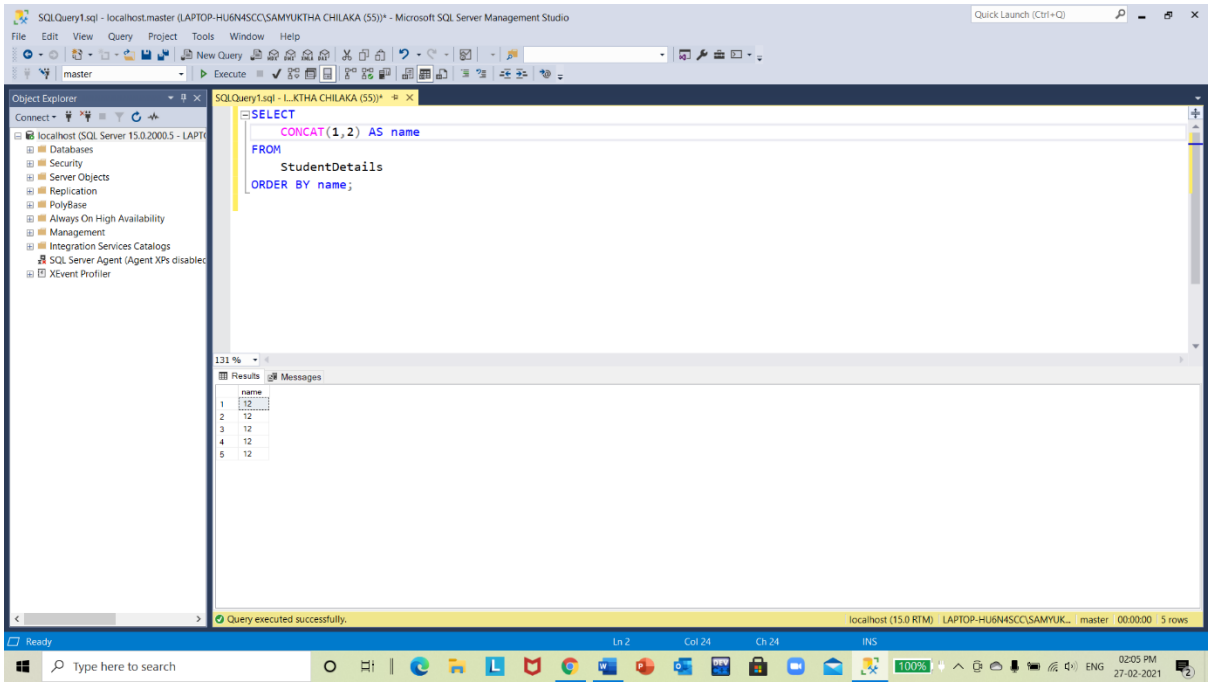
2) Illustrate how we can use Concat and As operators in SQL

Syntax:

CONCAT (string_value1, string_value2 [, string_valueN])
SQL **CONCAT** function is used to concatenate two strings to form a single string.



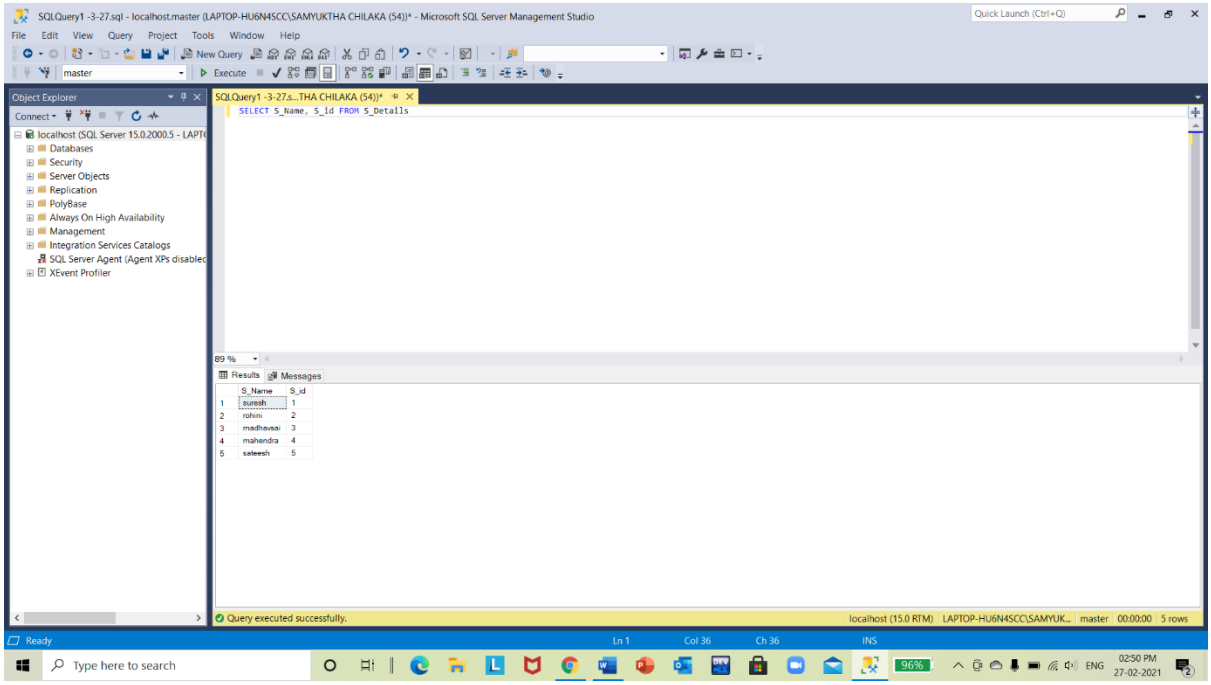




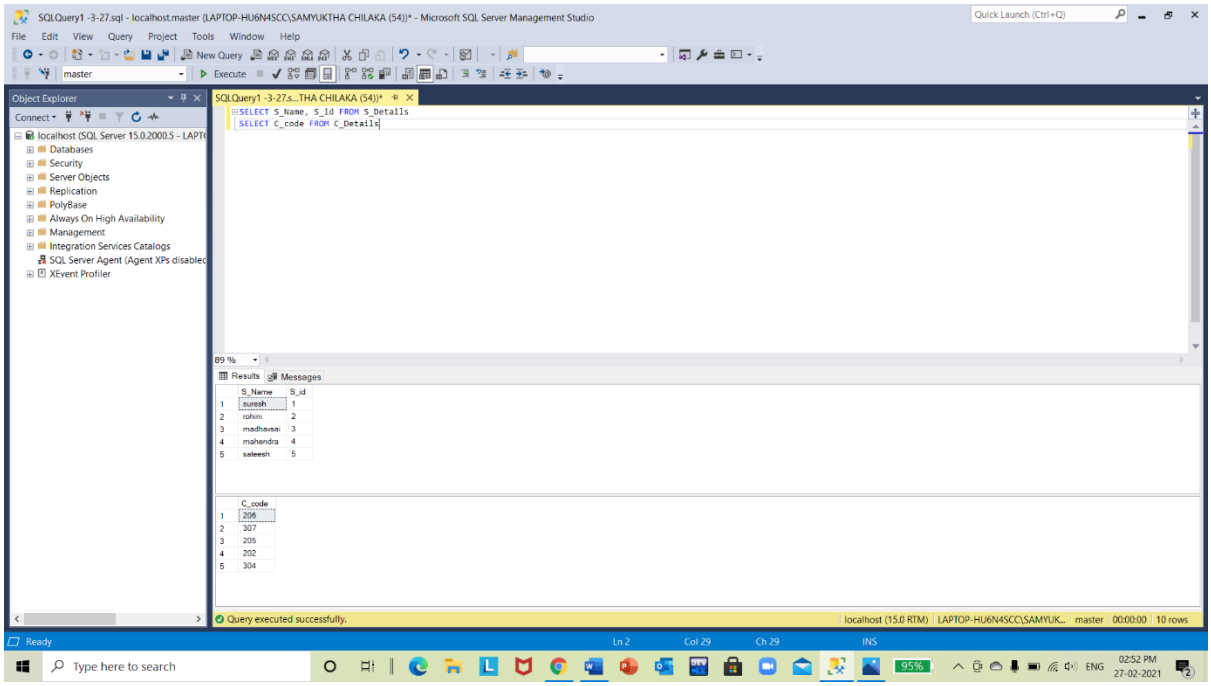
1). Write 5 Nested Queries for your respective database- the queries should not be very similar like just changing the where clause or just building all the queries on only one or two tables etc. The queries should make sense, it should cover most part of your database tables.

A) In nested queries, a query is written inside a query. The result of inner query is used in execution of outer query.

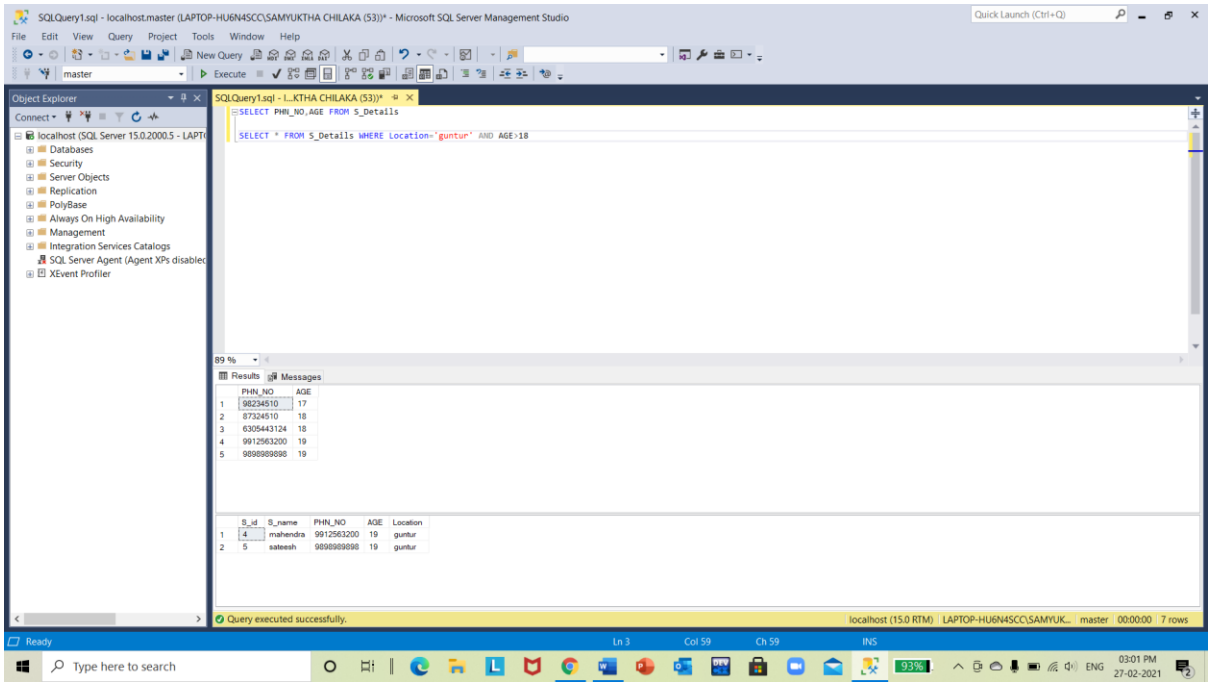
QUERY-1



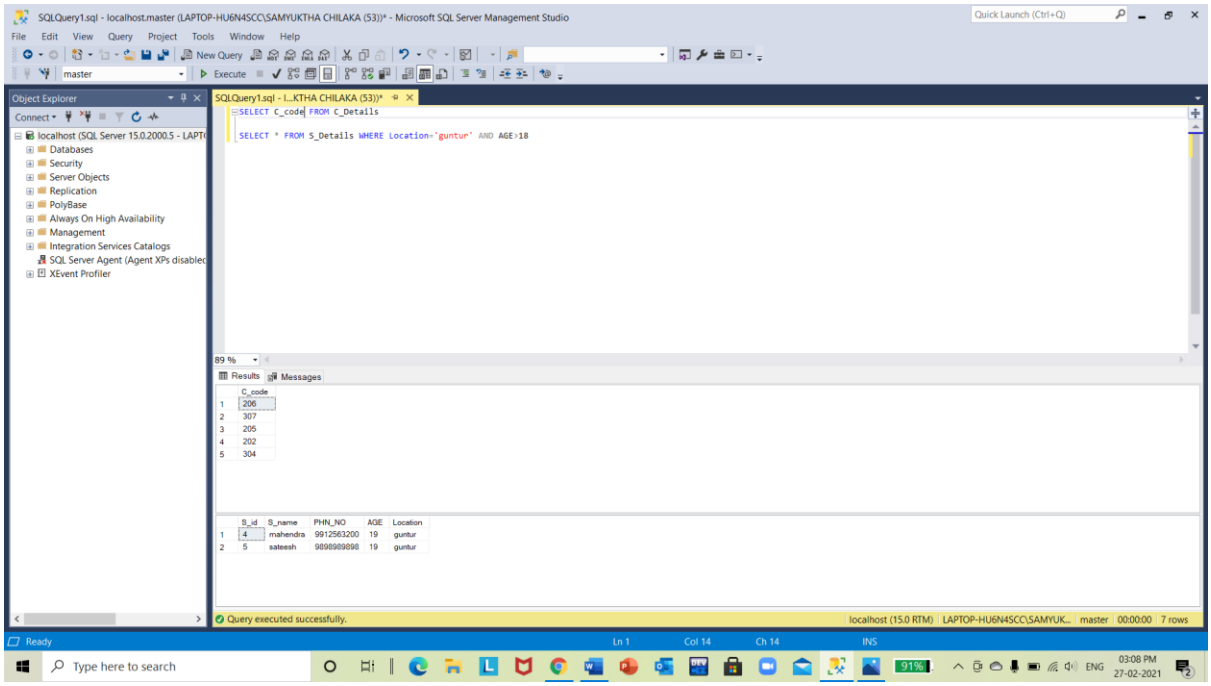
QUERY-2



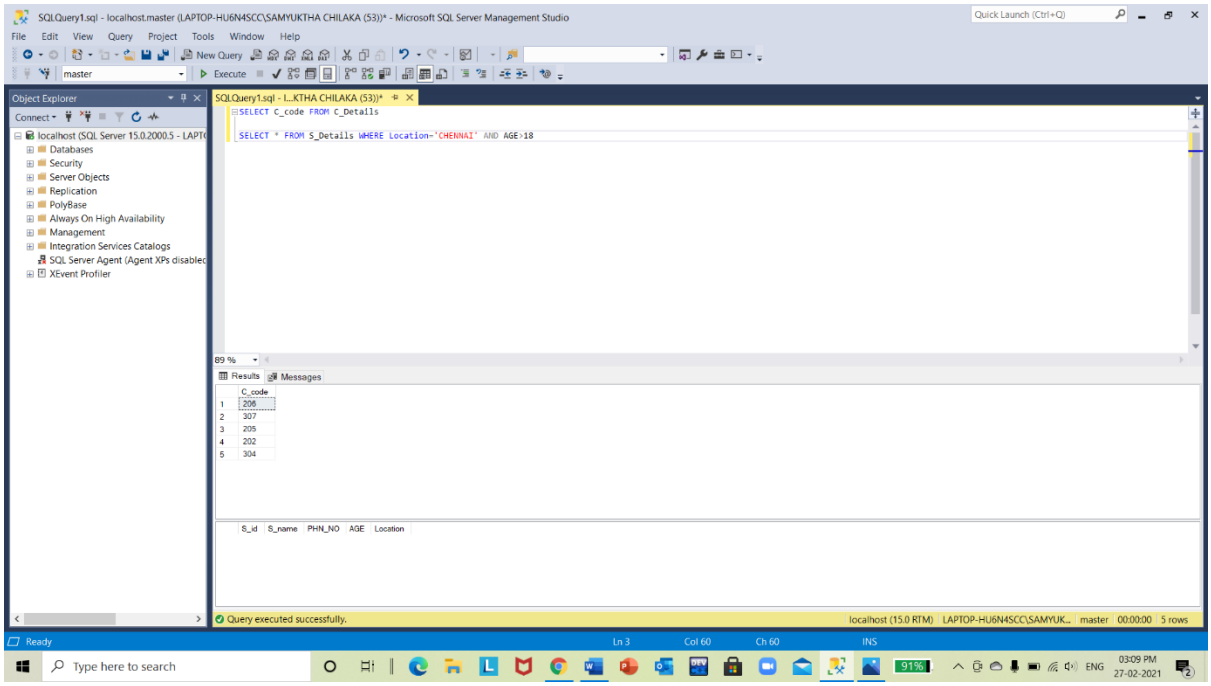
QUERY-3



QUERY-4



QUERY-5


SQLQuery1.sql - localhost.master (LAPTOP-HU6N4SCC\SAMYUKTHA CHILAKA (53))* - Microsoft SQL Server Management Studio
Quick Launch (Ctrl+Q)
File Edit View Query Project Tools Window Help
New Query
Execute
master
Object Explorer
Connect
localhost (SQL Server 15.0.2000.5 - LAPT
Databases
Security
Server Objects
Replication
PolyBase
Always On High Availability
Management
Integration Services Catalogs
SQL Server Agent (Agent XPs disabled
XEvent Profiler
SQLQuery1.sql - L...KTHA CHILAKA (53))*
SELECT C_code FROM C_Details
SELECT * FROM S_Details WHERE Location='CHENNAI' AND AGE>18
89 %
Results
Messages
C_code
1 206
2 307
3 205
4 202
5 304
S_id S_name PHN_NO AGE Location
Query executed successfully.
localhost (15.0 RTM) LAPTOP-HU6N4SCC\SAMYUK... master 00:00:00 5 rows
Ready
Ln 3 Col 60 Ch 60 INS
Type here to search
91%
ENG
03:09 PM
27-02-2021