

KUPPA VENKATA KRISHNA PAANCHAJANYA

Registration No.: 19BCS063

Database Management Systems Lab Assignment 4

Question 1: Write 5 Nested Queries for travel database.

Query –

SELECT first_name, last_name, phone FROM T3_CustomerDetails WHERE customer_id IN (SELECT customer_id FROM T3_BookingDetails WHERE payment_Amount > 30000);

SELECT customer_id, first_name, last_name FROM T3_CustomerDetails WHERE customer_id NOT IN (SELECT customer_id FROM T3_BookingDetails WHERE booking_id IN (SELECT booking_id FROM T3_PackageDetails WHERE package_name='KULU MANALI'));

SELECT customer_id FROM T3_CustomerDetails WHERE customer_id IN (SELECT customer_id FROM T3_BookingDetails WHERE booking_id IN (SELECT booking_id FROM T3_DestinationDetails WHERE hotel_name = 'Raj Palace'));

SELECT package_name, cost FROM T3_PackageDetails WHERE booking_id IN (SELECT booking_id FROM T3_Bus WHERE bus_type = '2 Seater');

SELECT package_name FROM T3_PackageDetails WHERE EXISTS (SELECT * FROM T3_Bus WHERE T3_PackageDetails.booking_id = T3_Bus.booking_id);

Database Output:

The screenshot displays the SQL Server Enterprise Manager interface with the 'T3_Travel' database selected. The 'Results' pane shows the output of five nested queries. The first query returns customer details for those with a booking payment amount greater than 30,000. The second query returns customer details for those not in a booking with a 'KULU MANALI' package. The third query returns customer IDs for those with a booking at 'Raj Palace'. The fourth query returns package names and costs for bookings on a '2 Seater' bus. The fifth query returns package names for packages that have at least one booking.

first_name	last_name	phone
Jai	Krishna	919999999912
Prabha	lingaraju	919999999913
Somesh	Thakur	919999999914
Deepak	Chowdary	919999999915
Karthik	Sajan	9199999999189

customer_id	first_name	last_name
0000000011	Jai	Krishna
0000000012	Prabha	lingaraju
0000000013	Somesh	Thakur
0000000014	Deepak	Chowdary
0000000015	Karthik	Sajan

package_name	cost
Manasarovar	50000.00
Manasarovar	50000.00
Manasarovar	50000.00
Manasarovar	50000.00
Manasarovar	50000.00
Manasarovar	50000.00

package_name
Kulu Manali
Kulu Manali
Kulu Manali
Kulu Manali

Question 2: Illustrate how we can use CONCAT and AS operators in SQL Query –

SELECT CONCAT(first_name, ' ', last_name) AS full_name FROM T3_CustomerDetails;

SELECT customer_id, phone AS contact_details FROM T3_CustomerDetails;

SELECT TOP 1 CONCAT(package_name, ' ', package_description) AS package FROM T3_PackageDetails WHERE package_name = 'MANASAROVAR';

Database Output:

The screenshot displays the SQL Server Enterprise Manager interface. The left pane shows the 'Object Explorer' with the 'T3_Travel' database selected. The right pane shows the 'Query Editor' with three SQL queries executed. The 'Results' pane displays the output of these queries.

Query 1: SELECT CONCAT(first_name, ' ', last_name) AS full_name FROM T3_CustomerDetails;

full_name
Kiran Kumar
Charan Rao
Farhan Abdul
Kissan Chary
Laban Seth
Chernan Kumar
Eeshwar Prasad
Raghavendra Swamy

Query 2: SELECT customer_id, phone AS contact_details FROM T3_CustomerDetails;

customer_id	contact_details
0000000021	7993672936
0000000018	919999999122
0000000019	919999999187
0000000015	919999999189
0000000011	91999999912
0000000012	91999999913
0000000013	91999999914
0000000014	91999999915

Query 3: SELECT TOP 1 CONCAT(package_name, ' ', package_description) AS package FROM T3_PackageDetails WHERE package_name = 'MANASAROVAR';

package
Manasarovar: Have a nice glimpse of Nature!

Question 3: Illustrate all the Comparison operators

Query –

SELECT customer_id, first_name, last_name FROM T3_CustomerDetails WHERE age = 21;

SELECT TOP 1 package_name FROM T3_PackageDetails WHERE cost = 25000;

SELECT customer_id FROM T3_CustomerDetails WHERE gender <> 'M';

SELECT TOP 1 bus_id, bus_type FROM T3_Bus WHERE bus_id <> 8714;

SELECT employee_id, name FROM T3_EmployeeDetails WHERE salary > 10000;

SELECT customer_id, CONCAT(first_name, last_name) AS full_name FROM T3_CustomerDetails WHERE age > 40;

SELECT employee_id, name FROM T3_EmployeeDetails WHERE salary < 8000;

SELECT customer_id, CONCAT(first_name, last_name) AS full_name FROM T3_CustomerDetails WHERE age < 30;

SELECT employee_id, name FROM T3_EmployeeDetails WHERE salary >= 10000;

SELECT customer_id, CONCAT(first_name, last_name) AS full_name FROM T3_CustomerDetails WHERE age >= 40;

SELECT employee_id, name FROM T3_EmployeeDetails WHERE salary <= 5000;

SELECT customer_id, CONCAT(first_name, last_name) AS full_name FROM T3_CustomerDetails WHERE age <= 20;

Database Output:

The image displays three screenshots of the SQL Server Enterprise Manager interface, showing the results of various queries executed against the T3 database. The interface includes a left-hand pane for the Object Explorer, a central query editor, and a bottom pane for the Results grid.

Query 1: The first screenshot shows the results of a query that selects customer_id, first_name, and last_name from T3_CustomerDetails where age is greater than or equal to 21. The results grid displays the following data:

customer_id	first_name	last_name
0000000004	Kissan	Chary

Query 2: The second screenshot shows the results of a query that selects employee_id, name, and full_name from T3_EmployeeDetails where salary is greater than or equal to 10000. The results grid displays the following data:

employee_id	name	full_name
01001	P. RAJESH	EeshwarPrasad
01002	A. RAMESH	RaghavendraSwamy
02003	B. SURESH	ShivajiChattrapati
02004	N. NARESH	Prabhalingaraju

Query 3: The third screenshot shows the results of a query that selects customer_id, full_name, and employee_id from T3_CustomerDetails where age is less than or equal to 20. The results grid displays the following data:

customer_id	full_name	employee_id
0000000007	EeshwarPrasad	01001
0000000008	RaghavendraSwamy	01002
0000000009	ShivajiChattrapati	02003
0000000012	Prabhalingaraju	02004

Question 4: Illustrate Logical operators except ANY, ALL and LIKE

Query –

SELECT customer_id, first_name, last_name FROM T3_CustomerDetails WHERE age >= 21 AND gender = 'M';

SELECT name FROM T3_EmployeeDetails WHERE salary>=10000 AND designation = 'Driver';

SELECT customer_id, first_name, last_name FROM T3_CustomerDetails WHERE age >= 40 OR gender = 'M'

SELECT employee_id, name FROM T3_EmployeeDetails WHERE salary>=10000 OR designation = 'Luggage Manager';

SELECT customer_id, first_name, last_name FROM T3_CustomerDetails WHERE NOT age >= 35;

SELECT bus_id FROM T3_bus WHERE NOT bus_type='Sleeper';

SELECT employee_id, name FROM T3_EmployeeDetails WHERE designation IN ('Driver', 'Cleaner');

SELECT hotel_name FROM T3_DestinationDetails WHERE city IN ('Kulu Manali', 'Burang');

SELECT employee_id, name FROM T3_EmployeeDetails WHERE salary BETWEEN 5000 AND 10000;

SELECT customer_id, CONCAT(first_name, last_name) AS full_name FROM T3_CustomerDetails WHERE age BETWEEN 21 AND 40;

Database Output:

The screenshot displays the SQL Server Enterprise Manager interface. The left pane shows the 'Object Explorer' with a tree view of the database structure, including Databases, System Databases, Database Snapshots, T3_Travel, Database Diagrams, Tables, System Tables, FileTables, External Tables, Graph Tables, and Views. The right pane shows the 'Query Editor' with a SQL query and its results. The query is a multi-statement query that selects data from several tables. The results are displayed in a grid format, showing the output of each statement. The status bar at the bottom indicates that the query was executed successfully.

Query Results:

customer_id	first_name	last_name
0000000001	Kiran	Kumar
0000000002	Charan	Rao
0000000003	Fahran	Abdul
0000000004	Kissan	Chary
0000000005	Cheman	Kumar
0000000007	Eeshwar	Prasad

name
P. RAJESH
A. RAMESH
B. SURESH
N. NARESH

customer_id	first_name	last_name
0000000001	Kiran	Kumar
0000000002	Charan	Rao
0000000003	Fahran	Abdul
0000000004	Kissan	Chary
0000000005	Laban	Seth
0000000006	Cheman	Kumar

employee_id	name
01001	P. RAJESH
01002	A. RAMESH
01007	O. JAYESH
02003	B. SURESH
02004	N. NARESH
02008	P. PARAM...

External Tables

Graph Tables

dbo.T3_BookingDetails

dbo.T3_Bus

dbo.T3_Car

dbo.T3_CustomerDetails

dbo.T3_DestinationDetails

dbo.T3_EmployeeDetails

dbo.T3_Flight

dbo.T3_PackageDetails

dbo.T3_Train

Views

External Resources

Synonyms

Programmability

Service Broker

Storage

Security

Team3_AdvocateConsultingFirm

Security

Server Objects

Replication

PolyBase

Always On High Availability

Management

Integration Services Catalogs

Results

Messages

	customer_id	first_name	last_name
1	000000001	Kiran	Kumar
2	000000002	Charan	Rao
3	000000004	Kissan	Chary
4	000000005	Laban	Seth
5	000000010	Chakram	Kumar
6	000000011	Jai	Krishna
7	000000013	Somesh	Thakur
8	000000014	Deepak	Chowdary

	bus_id
1	6938

	employee_id	name
1	01001	P. RAJESH
2	01002	A. RAMESH
3	01005	R. PARESH
4	02003	B. SURESH
5	02004	N. NARESH
6	02006	T. MALLE...

	hotel_name
1	Raj Palace
2	Raj Palace
3	Raj Palace
4	Raj Palace
5	Raj Palace
6	Raj Palace

Query executed successfully.

localhost (15.0 RTM) | LAPTOP-4ITT7EC0\krish... | T3_Travel | 00:00:00 | 94 rows

External Resources

Synonyms

Programmability

Service Broker

Storage

Security

Team3_AdvocateConsultingFirm

Security

Server Objects

Replication

PolyBase

Always On High Availability

Management

Integration Services Catalogs

	employee_id	name
1	01005	R. PARESH
2	01007	O. JAYESH
3	02006	T. MALLE...
4	02008	P. PARAM...

	customer_id	full_name
1	000000001	KiranKumar
2	000000002	CharanRao
3	000000003	FarhanRa...
4	000000004	KissanCh...
5	000000005	ChemanK...
6	000000011	JaiKrishna
7	000000013	SomeshT...
8	000000024	RathoreV...

Query executed successfully.

localhost (15.0 RTM) | LAPTOP-4ITT7EC0\krish... | T3_Travel | 00:00:00 | 94 rows