

17/10/25

TASK - 11

CRUD operations in graph Database

Aim: To Perform, create, Read, update and Delete operations on a Graph Database for the Hotel Management system.

1. Create Notes with properties

```
CREATE (h:Hotel {Hotel-ID : "H001", Hotel-Name : "sunrise inn",  
city : "chennai"}) ;  
CREATE (g:Guest {Guest-ID : "G101", Guest-name : "John", Phone : "  
9876543210"}) ;  
CREATE (n: Room {Room-No : "101", Room-Type : "Deluxe"}) ;
```

Output:

Added 3 notes successfully with their properties

2. View all Notes

```
MATCH (n) RETURN n
```

Output:

Display all Hotel, Guest and Room Notes

3. Create Relationships

```
MATCH (g:Guest {Guest-name : "John"}) -> (n: Room {Room-No : "101"})  
CREATE (g)-[:BOOKED]-(n)  
RETURN g, n ;  
MATCH (n: Room {Room-No : "101"}), (h: Hotel {Hotel-Name : "sunrise  
inn"})  
CREATE (n)-[:ASSIGNED TO]-(h)  
RETURN n, h ;
```

Output:

Relationships Booked and Assigned To created successfully

sunrise
fan

Mark

Ben

Math is : Hotel (1 return (1))

John

Mark

Ben

Relationship :-

Sunrise	Hotel	John

APR 19

EX NO.

PERIODICALS

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Not related because no relation exist b/w both
Sunrise which is transformed

Relationship Data

```
MATCH (g:Guest), (h:Booked) → (n:Room) ← (f:Assigned_to) ⇒ (hotel)  
RETURN g:Guest_name, n.Room_No, h.Hotel_Name;
```

Output:

Displays Guest name, Room number and Hotel name

5. Delete a Note

```
MATCH (g:Guest {Guest_Name: "John"}) DETACH DELETE g
```

Output:

Deleted one note and its connected relationships;

VEL TECH - CSE	
EX NO.	11
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
FOCUS (5)	-
Total (20)	16

✓
Prakash

Result:

Thus, the CRUD operations in graph Database for Hotel Management system created successfully.