Task 11 : CRUD operation in Graph Database :

Aim : To perform create, Read, update and delete operation on a graph database for the hotel management system.

Steps and cypher commands :

1. Create Nodes with properties :

CREATE (h: Hotel {hotel-ID : "1001", Hotel-Name : Sunrise h",

City : "Chennai"})

Output :

Added 3 nodes successfully with their properties.

2. View All nodes :

MATCH (n) RETURN n;

Output :

Display all Hotel Guest and Room nodes.

3. Create Relationships :

MATCH (g {Guest_Name : "John"}), (r: Room {Room_No : "101"})

CREATE (g) - [BOOKED] → (n)

RETURN g, r;

MATCH (r: Room {ROOM_NO : "101"}) (h: Hotel {hotel_Name : "

Sunrise Inn")

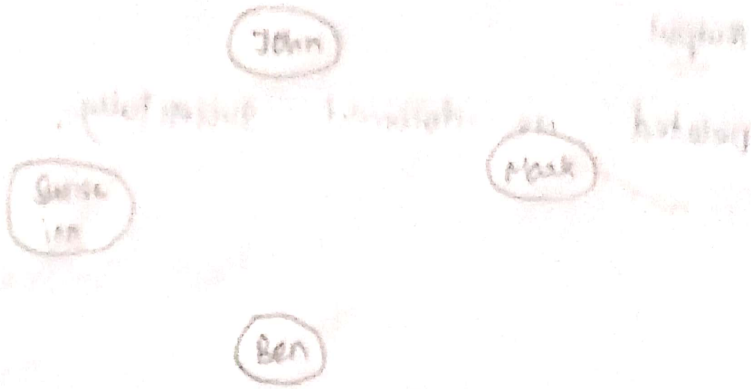
CREATE (r) : [ASSIGNED_TO] → (h)

RETURN r, h;

Output :

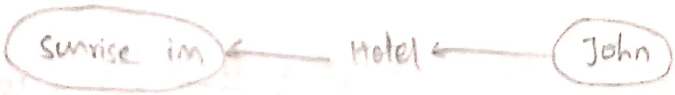
Relationships BOOKED and ASSIGNED TO created Successfully.

Match (n) return (n)

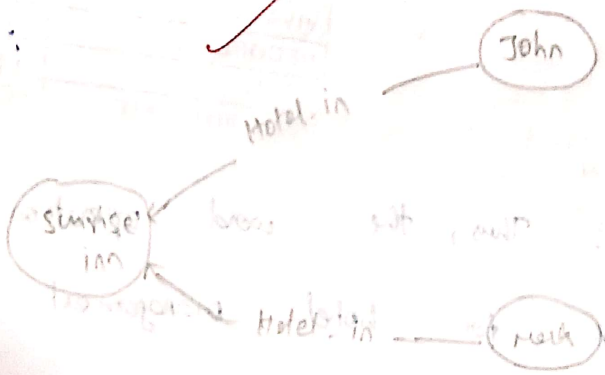


Match (in: hotel) return (n):

Relationship:



Relationship:



4. Retrive Relationship data

```
MATCH (g: Guest) (BOOKED) → (r: Room) - [ASSIGNED.R]
→ (h: HOTEL)
RETURN g.guest-Name , Room.No , h.hotel.Name ;
```

Output :

Displays Guest name, Room numbers and hotel name

5. Delete a Node :

```
MATCH (g: Guest { Guest-Name : 'John' y) DETACH
DELETE g;
```

Output :

Deleted one node and its connected relationship.

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EX NO.	11
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
RECORD (5)	—
TOTAL (20)	15
SIGN WITH DATE	

27/10/25

Result : Thus, the CRUD operations in graph declaration for Hotel management system executed successfully.