

Task 9:- CROD operations in graph Database.

Aim:- To perform CROD like creating, insertion, querying, finding, deleting operations on graph spaces.

The steps to get with Neo4j's Apsara graph database:-

Step 1:- copy and paste the following link into your web browser.

<https://neo4j.com/cloud/platform/apoc-on-graph-database/>

URL = does - get - started - drop de w.

Step 2:- click on "Start Free".

Step 3:- choose the option to continue with google.

Step 4:- Click the "Open" button.

Step 5:- After clicking "Open", a text file will be automatically downloaded. This file contains your user ID and password details.

Step 6:- Close the get started with Neo4j with beginner guides if its open.

Step 7:- you are now ready to begin practicing with graph Database.

Create node with properties:-

properties key-value pairs using which a node stores data, create a node with properties using CREATE clause and specify these properties separated by comma within flower brackets.

Syntax:-

CREATE (node: label {key1: value, key2: value -- })

return node. To verify creation of node, type and execute the following query in cypher prompt.

Syntax:- MATCH (n) RETURN n.

Creating Relationship:-

To create a relationship using CREATE clause and specify relationship within the square braces "[]" depending on direction of relationship it is placed like graph "→" arrow "→".

Syntax: CREATE (node1) - (Relationship Type) -> (node2).

Syntax:- CREATE (node1) - (Relationship Type) -> (node2).

Syntax:-

MATCH (a: label1, (node1), (b: label2, (node2)).

CREATE (a) - (: Relationship) -> (b) RETURN a, b.

Create a graph database for student course registration, create student and dept node and short values or properties

create a cricket board node:

create (cb: cricket Board (Board ID: "B1001" Name: "Sachin Cricket Board";

Address: "Chennai"; Pro: 987776699) return a, b

create team nodes:

create (t1: Team {Team ID: "CCR", Name: "Raj", Address: "Coimbatore", Captain: "SAMARTH Kumar" return b

create (t2: Team {Team ID: "CCR2", Board ID: "B1001", Name: "Raj", Captain: "SAMARTH Kumar" return b

create (t3: Team {Team ID: "CCR3", Board ID: "B1001", Name: "Raj", Captain: "SAMARTH Kumar" return b

create player nodes:

create (P₁, Player (player ID: '1' Team ID: 'CCB01'; name: 'Raj', Age: 25, Date of Birth: '24-Jan-1998', playing role: 'Batter', email: 'raj@gmail.com', return P₁

create (P₂, Player (player ID: '2' Team ID: 'CCB01'; name: 'Aarav', Age: 23, Date of Birth: '08-Jan-1999', Playing Role: 'Batsman', email: 'aarav@gmail.com', return P₂

Creating Relationship among Cricketboard and team:

match (cb, cricket board (Board ID: 'B1001'), cb, team (Team ID: 'CCB01'))

create (cb) - (v₁ to v₂) → (k₁) return cb, v₁

match (cb, cricket board (Board ID: 'B1001'), (k₁, team ID: 'CCB01'))

create (cb) - (v₁ to v₂) → (k₁) return cb, v₁

match (cb, cricket board (Board ID: 'B1001'), (k₁, team ID: 'CCB01'))

create (cb) - (v₁ to v₂) → (k₁) return cb, v₁

Creating relationship among players and team

match (P₁, player (player ID: '1') (k₁, team (team ID: 'CCB01'))

create (P₂) (v₁ player) → (k₁) return P₂, k₁

match (P₂, player (player ID: '2'), k₁, team (team ID: 'CCB01'))

create (P₂) (v₁ player) → (k₁) return P₂, k₁

EX NO.	9
PERFORMANCE (5)	✓
RESULT AND ANALYSIS (5)	✓
VIVA VOCE (5)	✓
RECORD (5)	✓
SIGN WITH DATE	✓

Result:-

Thus, the CRUD operations (Creating, inserting, querying, finding, deleting operation) on graph space execution successfully.