

Task 11 CRUD operations IN Graph database

14/10/25

Aim: To perform CRUD operations like creating, inserting, querying, finding, deleting operations on graph spaces.

Create Node with Properties:

Properties are the key-value pairs using which a node with properties using the CREATE clause. You need to specify these properties separated by commas with in flower braces "{}".

Syntax:

Following is true syntax to create a node with properties.

CREATE (node: label {key: value, key: value ...})

• Creating Relationships:

We can create a Relationship using CREATE clause we will specify Relationship within the square braces "[]" depending on the direction of relationship.

Syntax:

Following is the syntax to create a relationship using CREATE clause.

CREATE (node1) - [Relationship Type] -> (node2)

Creating Relationships Btw the Existing Nodes

You can also create a relationship between the existing nodes using the MATCH clause.

Syntax:

Following is the syntax to create a relationship using the MATCH clause.

MATCH (a: Label of Node 1), (b: Label of Node 2)

WHERE a.name = "name of node 1" AND b.name = "name of node 2"

RETURN a, b

• Deleting a particular node:-

To delete particular node, you need to specify the details of the node in the place of "n" in the above query.

• Syntax:

Following is the syntax to delete a particular node From Neo4J using DELETE clause.

MATCH (node : label { Properties. ... })

DETACH DELETE node

Create a graph database for student course registration
create student & dept node and insert values of properties

Create n: student { Sid: "VTU 30238",

Sname: "John"

deptname: "CSE" }

)

OUTPUT

Added, label created, node set 3 properties,

Completed after 232ms

Create n: student { Sid: "VTU 30237"

Sname: "Dharsana"

deptname: "EEE" }

OUTPUT

Added 1 label, created 1 node, set 3 properties,

Completed after 16ms.

Create (n:dept deptname: "CSE", deptid: "d001" }

OUTPUT

Added, label, created, node, set 2.

properties, completed after 72ms

Select all nodes in your database using
match command
*match(n) return (n)

Vijay

CSE

Dharsana

John

match (n: student) return (n)
OUTPUT:-

Vijay

Dharsana

John

a) Create a relationship between student and CSE

MATCH students (d: dept) WHERE s.name =
'VITAY' AND d.deptname = 'CSE'
return sid

OUTPUT:

CSE ← student → VITAY
AT

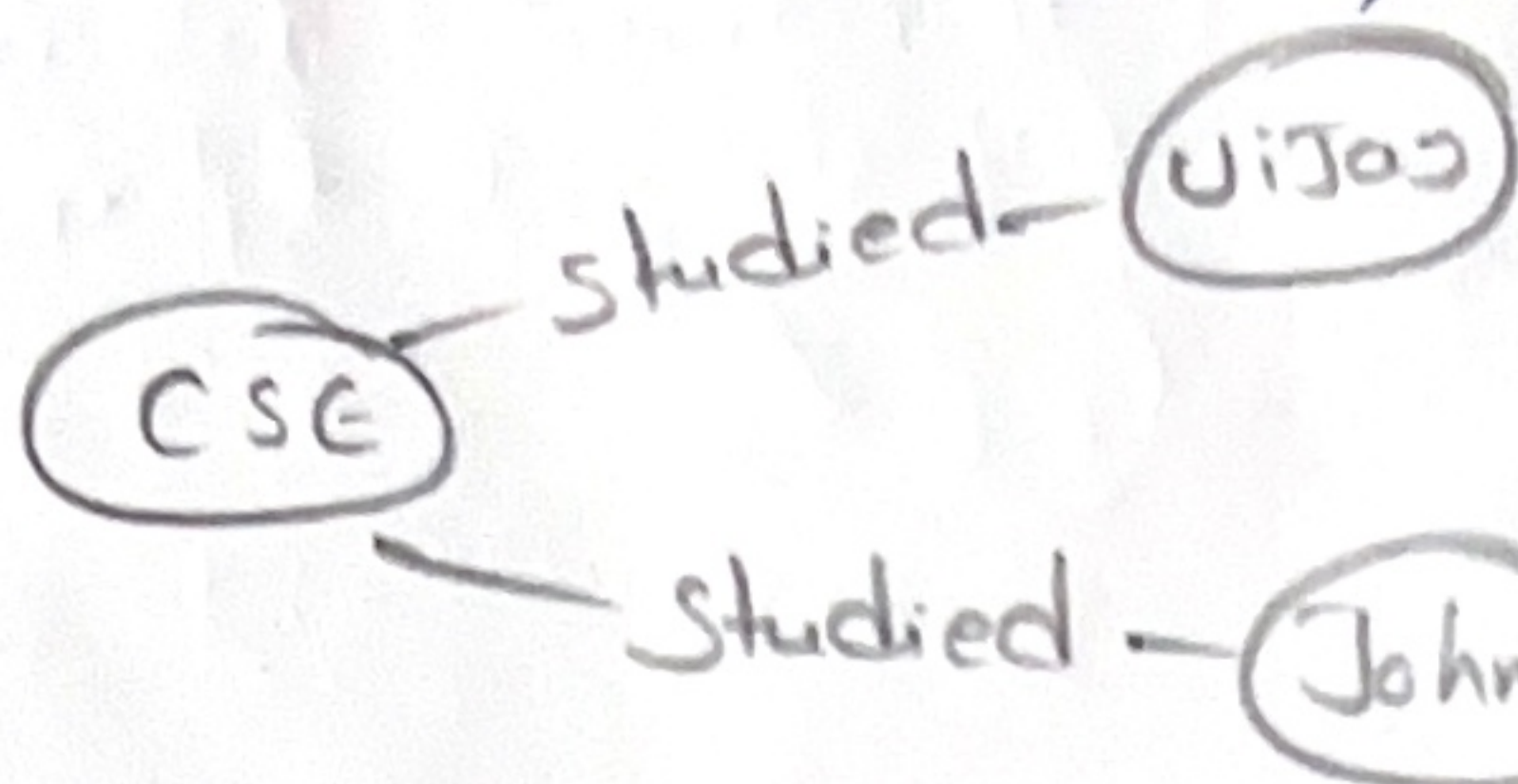
MATCH (s: student); (d: dept) WHERE s.sname = 'John'
AND d.deptname = 'CSE'

CREATE (s) - [st. STUDIED - AT] -> (d)
return sid

OUTPUT:-

CSE ← Studied → John
A

match(n) return(n)



Dharsana

VVL TECH - CSE	
Roll NO.	11
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
RECORD (5)	
TOTAL (20)	16
SIGN WITH DATE	

Result: The implementation of CRUD operations like creating, inserting, finding and remaining operations using Graph DD is successfully executed.