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

Create Node with properties:-

Properties are the key-value pairs using which a node stores data. you Can create node with properties using the create clause. You need to specify these properties seperated by commas within the flower brace, "{}"

Syntax

Following is the Syntax to create a node with properties

CReate (node:label {key 1:value, key 2:value ,------- ?)

· Returning the Created Node

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

Match (n) Return n

° Creating Relation ships:-

we can create a relationship using the create Clause we will specify the relationship within the Square braces "[ ]" depending on the direction of the relationship it is placed between hypen "_" and arrow "→ "

CReate (node 1) - [: Relationship Type] → (node 2)

Creating a Relationship between the existing nodes

You Con also Creates a relationship between the existing nodes using the match Clause.

Syntax:-

Match (a: label of node 1), (b: label of node 2)

where a.name = "name of node1" AND b.name = "name of node 2"

CReate (a) - [:Relation] → (b)

Return a,b

Delete a particular node

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

Syntax:-

MATCH (node: label { propertie ___?)

DETACH Delete node

Create a graph database for student course registration, Credit Student and dept node and insert values of propeitie

CReate(n: Student {Std :"VTU 14500", S.name :"John", deptname :"CSE"?

Output:.

Added 1 label, Created 1 node, Set 3 properties, Completed after 232 ms.

Create (n: Student {Std :"VTU14501", Sname:"Dharsan", dept name:" GGE?)

Output:_

Added 1 label, Created 1 node, Set 3 propeitie, completed after 16 ms.

Create (w: Student { Sid: "VTU 14502", Sname:"vijay", deptname:"CSE"?)

output:-

Added 1 label, Created 1 node, set 3 properties, Completed 12 ms

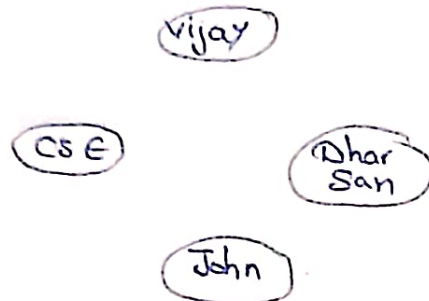Create (n: dept { deptname :"ESE". deptid:" d001"?)

output-
Added 1 label, created 1 node, set 2 properties,
Completed after 72 ms
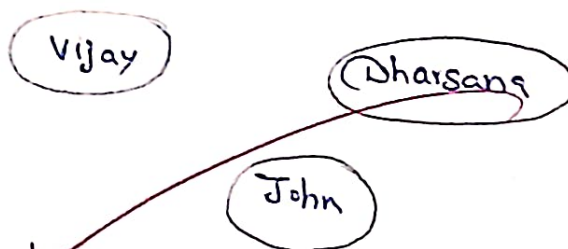Select all the nodes in your database using match
Command
* match(n) return(n)
output :-

(Vijay)

(CS E)   (Dhar San)

(John)

* match (n: Student)return (n)
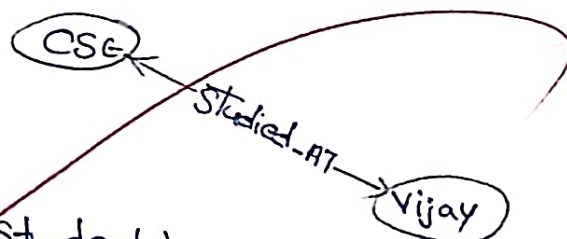output :-

(Vijay)   (Dharsans)

(John)

a) create relationship between student and cse
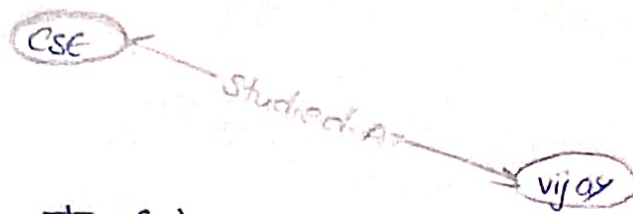Match (S: Student),(d :dept) where S. Sname = 'vijay' AND
d. deptname = 'cse'
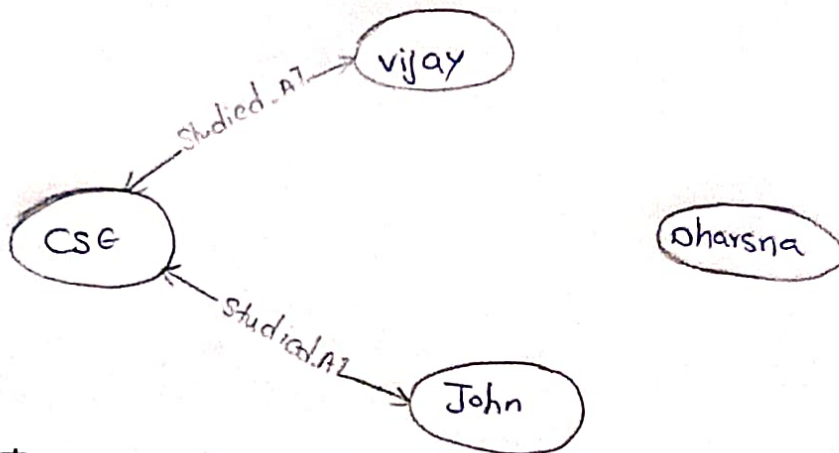Create(s) - [st; Studied-AT]→(d)
return S, d
output

(CSG)
        Studied-AT→ (Vijay)

Match(s: Student),(d:dept) where S. Sname = 'John'
And d. deptname = 'cse'
create (s) - [st: STUDIED -AT]→(d)
return S,d

CSE ─ Studied.A → vijay

Match(n) return(n)
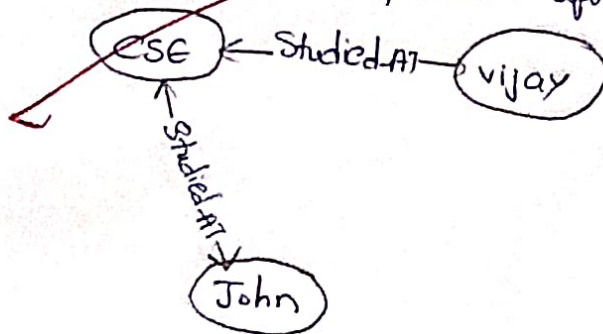

vijay ← Studied.n7 ─ CSE
CSE ─ studied.A7 → John
Dharsna

b) delete a node from Student

match (n: Student {Sname:"Dharsana'?) Delete (n)

output:-

Deleted : node Complacted after 10834 ms

CSE ← Studied.A7 ─ vijay
CSE ← Studied.A7 ─ John

Result:- The implementation of crud operations like Creating, finding and removing operations using Graph DB is Successfully executed.