

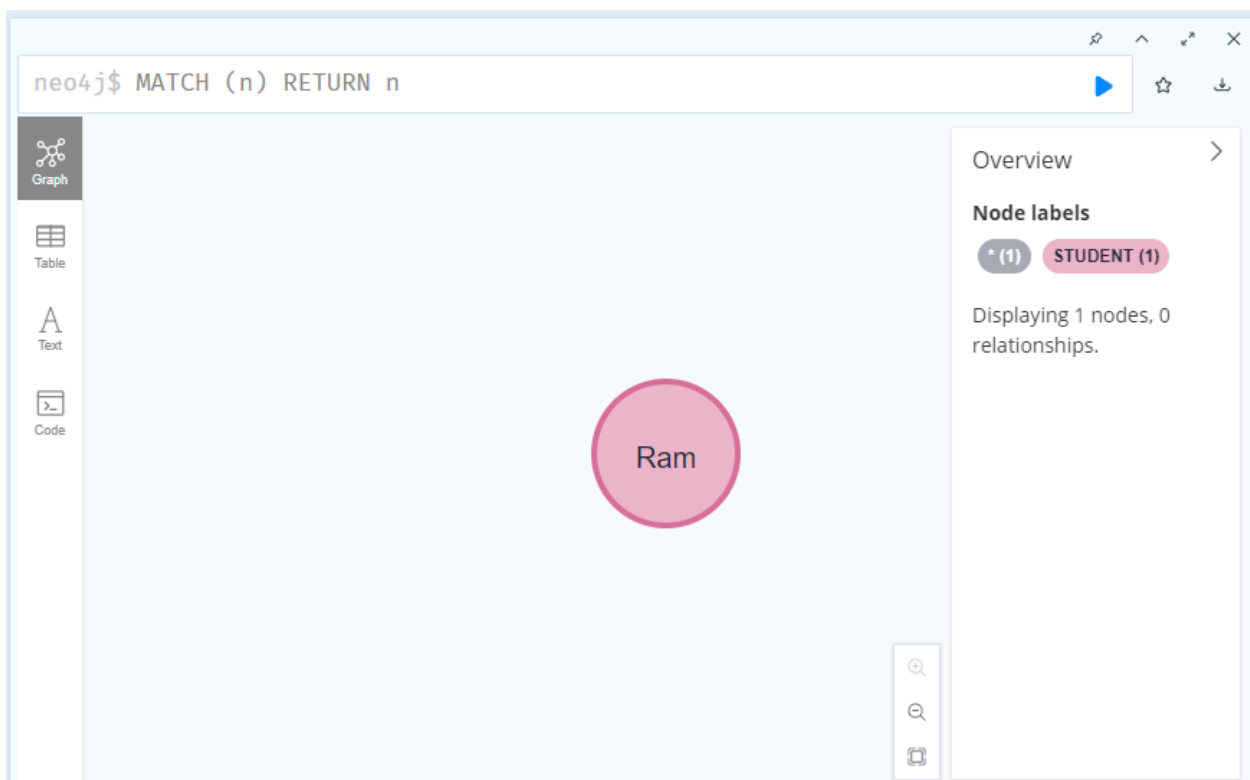
EXPERIMENT-2

Neo4j

Code with Screenshots:



The screenshot shows the Neo4j Cypher query editor. The query bar contains the command: `neo4j$ CREATE (a:STUDENT {name:"Ram" , id: 12})`. A blue play button is to the right of the query. Below the query bar, a status message reads: "Added 1 label, created 1 node, set 2 properties, completed after 27 ms." The left sidebar has a "Table" view selected, indicated by a table icon. Below it is a "Code" view icon. The main area is empty.



The screenshot shows the Neo4j Graph view. The query bar contains the command: `neo4j$ MATCH (n) RETURN n`. A blue play button is to the right of the query. The main area displays a single node, a pink circle labeled "Ram". The left sidebar has a "Graph" view selected, indicated by a graph icon. Below it are "Table", "Text", and "Code" view icons. The right sidebar shows an "Overview" panel with the following information:

- Node labels**
- * (1)** **STUDENT (1)**
- Displaying 1 nodes, 0 relationships.

At the bottom right of the graph area, there are three icons: a magnifying glass, a search icon, and a refresh icon.

```
neo4j$ CREATE (a:STUDENT {name:"Abhi" , id: 14})
```



Table



Code

Added 1 label, created 1 node, set 2 properties, completed after 6 ms.

Added 1 label, created 1 node, set 2 properties, completed after 6 ms.

```
neo4j$ CREATE (a:STUDENT {name:"Raj" , id: 13})
```



Table

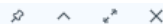


Code

Added 1 label, created 1 node, set 2 properties, completed after 6 ms.

Added 1 label, created 1 node, set 2 properties, completed after 6 ms.

```
neo4j$ CREATE (a:STUDENT {name:"Ajay" , id: 15})
```



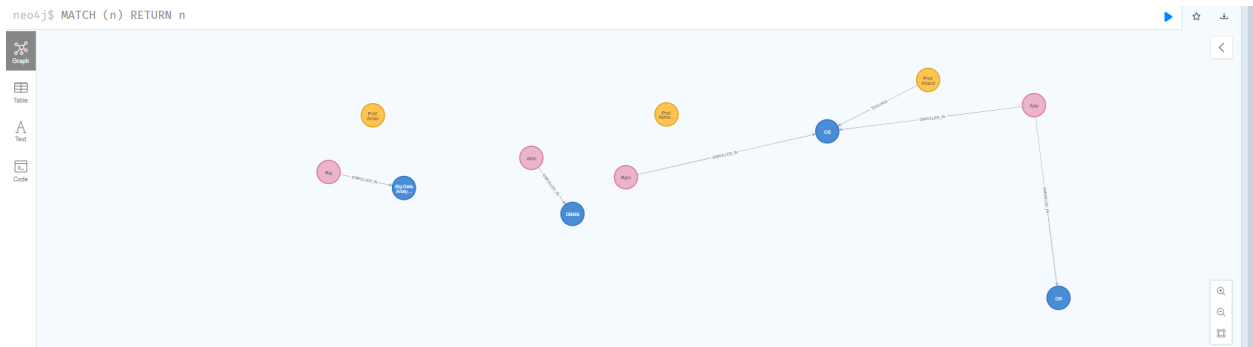
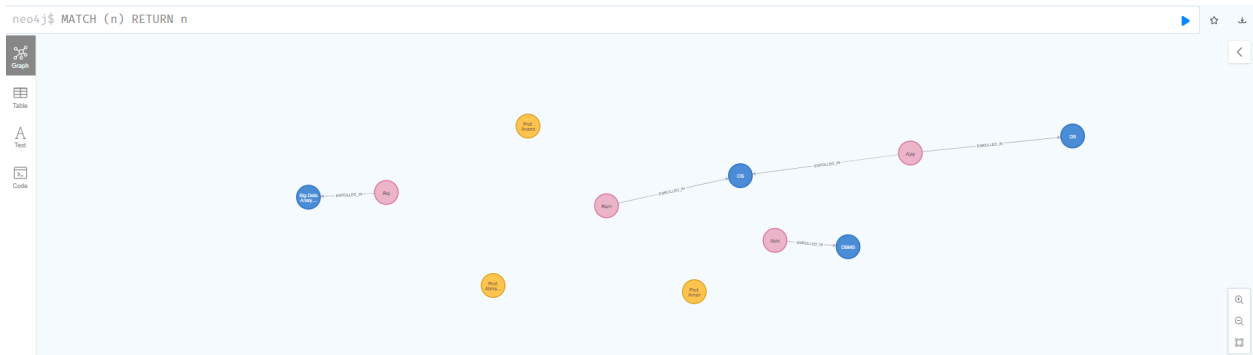
Table



Code

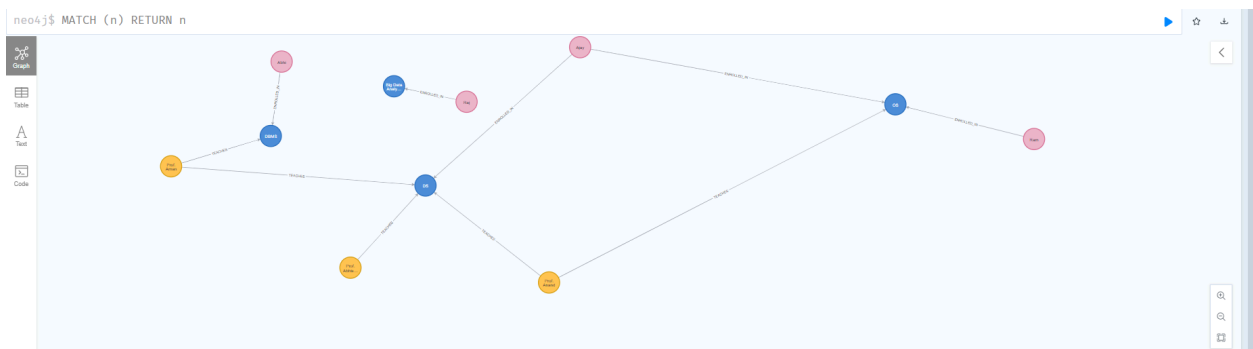
Added 1 label, created 1 node, set 2 properties, completed after 6 ms.

Added 1 label, created 1 node, set 2 properties, completed after 6 ms.



```
neo4j$ MATCH (a:TEACHER) , (b:COURSE) where a.name = "Prof. Anand" AND b.name = "OS" CREATE (a)-[r:TEACHES]->(b)
```

Created 2 relationships, completed after 12 ms.



```
neo4j$ MATCH (a:TEACHER) , (b:COURSE) where a.name = "Prof. Aman" AND b.name = "DBMS" or b.name = "DS" CREATE (a)-[r:TEACHES]→(b)
```

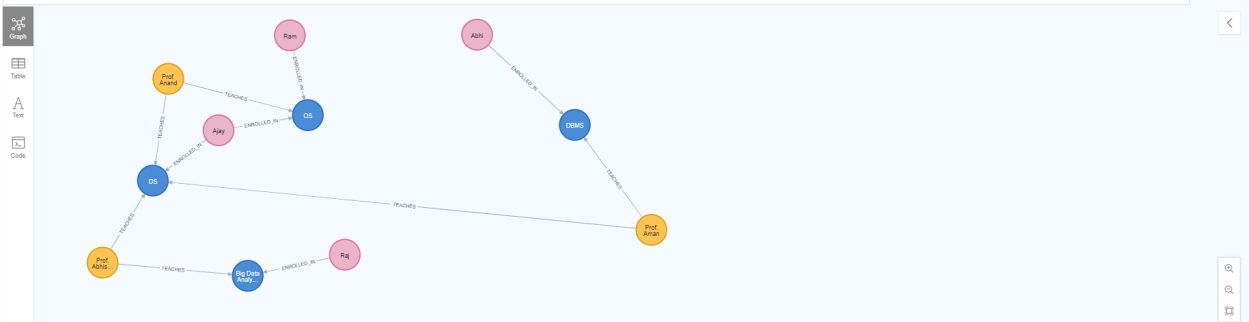
Created 4 relationships, completed after 12 ms.

Created 4 relationships, completed after 12 ms

```
neo4j$ MATCH (a:STUDENT {name:"Ajay"}) SET a.id = 21 RETURN a
```

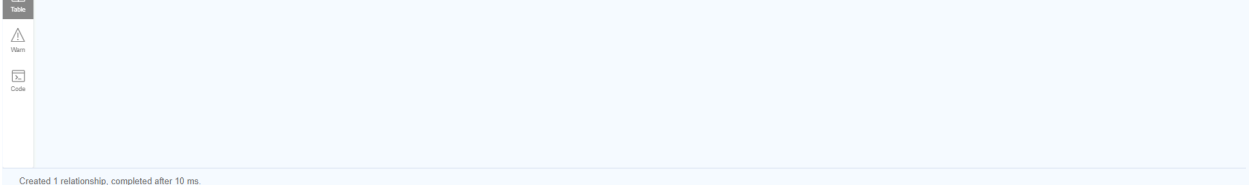


```
neo4j$ MATCH (n) RETURN n
```

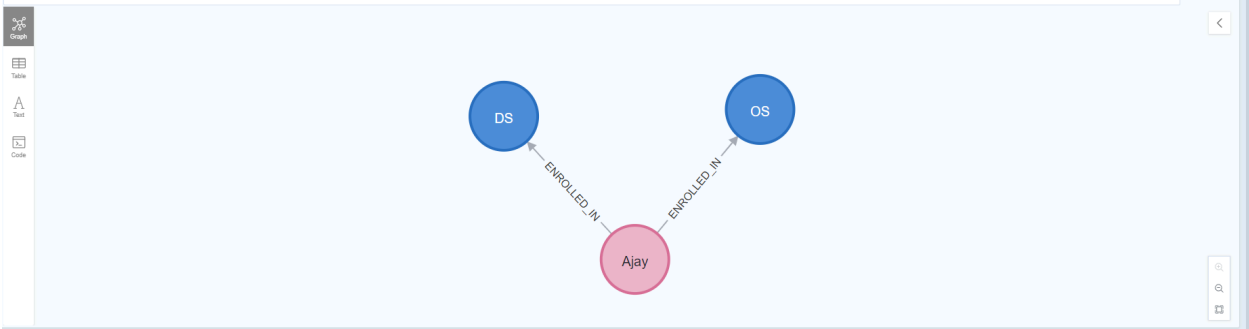


```
neo4j$ MATCH (a:TEACHER), (b:COURSE) where a.name = "Prof. Abhishek" AND b.name = "Big Data Analysis" CREATE (a)-[r:TEACHES]->(b)
```

Created 1 relationship, completed after 10 ms.



```
neo4j$ MATCH (a:STUDENT {name:"Ajay"}) -[r:ENROLLED_IN]->(b:COURSE) RETURN a,b
```



neo4j\$ MATCH (n) DETACH DELETE n

Deleted 12 nodes, deleted 11 relationships, completed after 8 ms.

neo4j\$ MATCH (n) RETURN n

```
graph LR
    Ram((Ram)) -- ENROLLED_IN --> DS1((DS))
    Ram -- TEACHES --> ProfAman1((Prof. Aman))
    DS1 -- TEACHES --> ProfAman1
    DS1 -- TEACHES --> ProfAman2((Prof. Aman))
    DS1 -- TEACHES --> Ajay1((Ajay))
    DS1 -- TEACHES --> Aman1((Aman))
    ProfAman1 -- TEACHES --> DBMS1((DBMS))
    ProfAman2 -- TEACHES --> DBMS1
    Ajay1 -- ENROLLED_IN --> DBMS1
    Aman1 -- ENROLLED_IN --> DBMS1
    DS2((DS)) -- TEACHES --> ProfAman3((Prof. Aman))
    DS2 -- TEACHES --> Ajay2((Ajay))
    DS2 -- TEACHES --> Aman2((Aman))
    ProfAman3 -- TEACHES --> DBMS2((DBMS))
    Ajay2 -- ENROLLED_IN --> DBMS2
    Aman2 -- ENROLLED_IN --> DBMS2
```

neo4j\$ MATCH (a:STUDENT{name: "Ajay"})-[r]-(b) DELETE r

Deleted 3 relationships, completed after 41 ms.

neo4j\$ MATCH (a:TEACHER {name:"Prof. Aman"}) -[r:TEACHES]->(b:COURSE) RETURN a,b

```
graph LR
    ProfAman((Prof. Aman)) -- TEACHES --> DS((DS))
    ProfAman -- TEACHES --> DBMS((DBMS))
```