

1. IN,AND,OR operation
2. Where
3. Set,remove
4. Merge ,on create, on match
5. Aggregate
6. Skip,limit,order by
7. Union,union all

Graph Data : CREATE

```
(e1:Employee {name: "Ram", age: 35, role: "Manager"}),
(e2:Employee {name: "Shyam", age: 28, role: "Developer"}),
(e3:Employee {name: "Amit", age: 30, role: "Developer"}),
(e4:Employee {name: "Sita", age: 32, role: "Analyst"}),

(d1:Department {name: "IT"}),
(d2:Department {name: "HR"}),
(d3:Department {name: "Finance"}),

(e1)-[:Manages]->(d1),
(e1)-[:Manages]->(d3),
(e2)-[:Works_In]->(d1),
(e3)-[:Works_In]->(d1),
(e4)-[:Works_In]->(d2);
```

```
MATCH (e:Employee)
WHERE e.role IN ["Manager", "Analyst"]
RETURN e.name, e.role;
```

```
MATCH (e:Employee)
WHERE e.role = "Developer" AND e.age > 28
RETURN e.name, e.age;
```

```
MATCH (e:Employee)-[:Works_In | Manages]->(d)
WHERE e.role = "Manager" OR d.name = "IT"
RETURN e.name, e.role, d.name;
```

```
MATCH (e:Employee)
WHERE NOT e.role = "Manager"
RETURN e.name, e.role;
```

```
MATCH (e:Employee)
WHERE e.name STARTS WITH "S"
```

```
RETURN e.name, e.role;
```

```
MATCH (e:Employee)
```

```
SET e.salary = 50000
```

```
RETURN e.name, e.salary;
```

Add the `Senior` Label and Set a New Property

```
MATCH (e:Employee {name: "Ram"})
```

```
SET e:Senior, e.experience = "10 years"
```

```
RETURN e;
```

Remove an Existing Label and Add a New One

```
MATCH (e:Employee {name: "Ram"})
```

```
REMOVE e:Employee
```

```
SET e:Manager
```

```
RETURN e.name, labels(e);
```

Change **Shyam's role to Senior Developer:**

```
MATCH (e:Employee {name: "Shyam"})
```

```
SET e.role = "Senior Developer"
```

```
RETURN e;
```

```
MATCH (e:Employee)
```

```
REMOVE e.salary
```

```
RETURN e;
```

```
MATCH (e:Employee {name: "Amit"})
```

```
REMOVE e:Employee
```

```
RETURN e;
```

Outgoing:

```
MATCH (e:Employee {name: "Ram"})-[:Manages]->(d:Department)
```

```
RETURN e.name AS Employee, COUNT(d) AS OutgoingRelationships;
```

Ingoing:

```
MATCH (e:Employee)-[:ReportsTo]->(d:Department {name: "HR"})
```

```
RETURN d.name AS Department, COUNT(e) AS IncomingRelationships;
```

Lets take scenario:

Three Students(Utkarsh,Anmol, Prashant)

Two dept(CS,MATH)

Utkarsh study on CS

Anmol study on MATH

Prashant take Lab classes both CS and MATH dept

Relationship are study and take classes

Scenario:

Chrish works for scope and jeff also, make this in one query

Utkarsh and anmol works for MATH and Utkarsh ,Prashant take lab classes to CS-create a full path