

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