Queries

# Join View

## SQL statement

DROP VIEW IF EXISTS

Job\_Details;

CREATE VIEW Job\_Details AS SELECT

/\*This view will show each job with their associated employee for contact, office and its company, sector, contract type and remote type and all the job details\*/

j.Id AS "Job ID",

j.Title AS "Job Title",

j.DatePosted AS "Posting Date",

j.Salary,

j.ExpiryDate AS "Expiry Date",

j.Description,

o.Address AS "Office Address",

o.City AS "City of Office",

o.Country AS "Country of Office",

o.PhoneNo AS "Office Phone Number",

c.Name AS "Company",

e.Email AS "Contact email for questions",

e.PhoneNo AS "Contact phone number for questions",

CONCAT(e.FirstName, ' ', e.Surname) AS "Name of Contact",

s.Name AS "Sector",

co.Name AS "Contract Type",

r.Name AS "Remote"

FROM

L\_Job j

JOIN L\_Office o ON

j.OfficeId = o.Id

JOIN L\_Company c ON

o.CompanyId = c.Id

JOIN L\_Employee e ON

j.EmployeeId = e.Id

JOIN L\_Sector s ON

j.SectorId = s.Id

JOIN L\_Contract co ON

j.ContractId = co.Id

JOIN L\_Remote r ON

j.RemoteId = r.Id;

SELECT

\*

FROM

Job\_Details;

## A screenshot of a computer Description automatically generatedResult

# WHERE Clause Statement

## SQL statement

DROP VIEW IF EXISTS

Jobs\_in\_Tech;

CREATE VIEW Jobs\_in\_Tech AS SELECT

/\*This view will show each job that belongs in a certain sector. In this example, it is jobs in the tech sector\*/

j.\*,

s.Name

FROM

L\_Job j

JOIN L\_Sector s ON

j.SectorId = s.Id

WHERE

s.Name = "Tech";

SELECT

\*

FROM

Jobs\_in\_Tech;

## Result

A screenshot of a computer

Description automatically generated

# Aggregate Function

## SQL statement

## DROP VIEW IF EXISTS

## Job\_Grouped\_by\_Salary;

## CREATE VIEW Job\_Grouped\_by\_Salary AS SELECT

## /\*This view will show groups of jobs that have a certain salary.\*/

## COUNT(j.Id),

## j.Salary

## FROM

## L\_Job j

## GROUP BY

## j.Salary

## ORDER BY

## j.Salary,

## j.Id;

## SELECT

## \*

## FROM

## Job\_Grouped\_by\_Salary;

## Result

A table with numbers and numbers

Description automatically generated

# Filtering records

## SQL statement

DROP VIEW IF EXISTS

Application\_Janurary\_Filter;

CREATE VIEW Application\_Janurary\_Filter AS SELECT

/\*This view will show a list of applications made in a certain month. In this example it is the month of January\*/

a.\*

FROM

L\_Application a

WHERE

a.ApplicationDate LIKE "2024-01%";

SELECT

\*

FROM

Application\_Janurary\_Filter;

## Result

A screenshot of a computer

Description automatically generated

# Java code snippet (Filtering records)

## Code snippet

//connection details are above this snippet

Connection con = DriverManager.*getConnection*(urlDB, username, password);

Statement stmt = con.createStatement();

// result is stored in a result set names rs.

ResultSet rs = stmt.executeQuery("SELECT \* FROM Application\_Janurary\_Filter");

**while** (rs.next())

System.***out***.println(rs.getInt(1) + " " + rs.getInt(2) + " " + rs.getInt(3) + " " + rs.getInt(4) + " " + rs.getInt(5) + " " + rs.getString(6) + " £" + rs.getString(7));

stmt.close(); // connection object is closed.

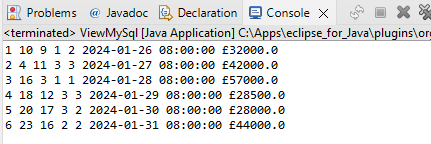
con.close();

} **catch** (Exception e) {

System.***out***.println(e);

}

## Result



# Java code snippet (Insert Statement)

## Code snippet

//connection details are above this snippet

Connection con = DriverManager.*getConnection*(urlDB, username, password);

Statement stmt = con.createStatement();

// result is stored in a result set names rs.

ResultSet rs = stmt.executeQuery("SELECT \* FROM L\_Company");

**while** (rs.next())

System.***out***.println(rs.getInt(1) + " " + rs.getString(2) + " " + rs.getString(3));

System.***out***.println("Enter name of company:");

String name = myScanner.nextLine(); // Read user input

System.***out***.println("Enter phone number of company:");

String phoneNo = myScanner.nextLine(); // Read user input

String MysqlInsert = "INSERT IGNORE INTO L\_Company (Name, PhoneNo) VALUES ('" + name+ "', '" + phoneNo + "')";

stmt.executeUpdate(MysqlInsert);

System.***out***.println("\n Records added successfully! \n");

rs = stmt.executeQuery("SELECT \* FROM L\_Company");

**while** (rs.next())

System.***out***.println(rs.getInt(1) + " " + rs.getString(2) + " " + rs.getString(3));

stmt.close(); // connection object is closed.

con.close();

myScanner.close();

} **catch** (Exception e) {

System.***out***.println(e);

}

## Result

