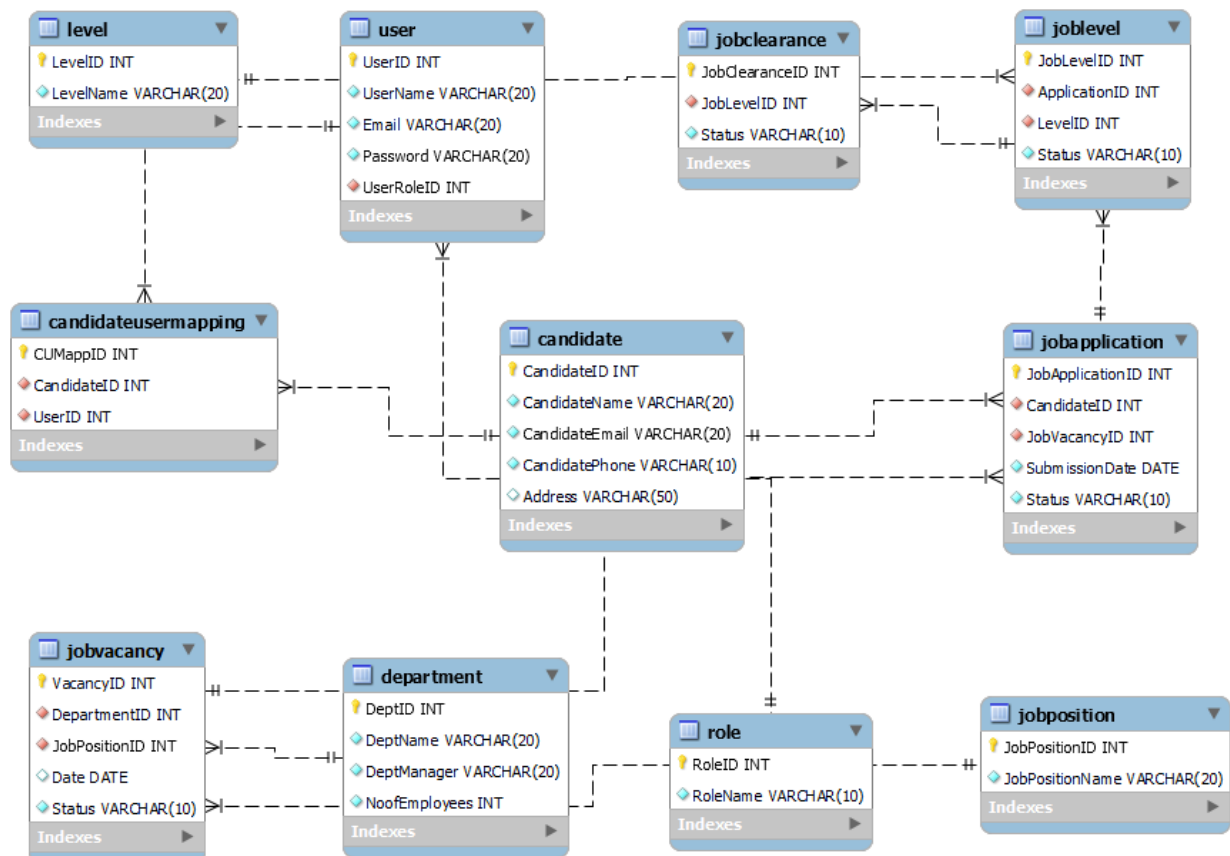# DB Task 3 - Querying

Submitted By,

Abhijith A Nair

Q. Recruitment Management System
List all the job vacancy created by a particular department for the year 2023 and the number of candidates selected for that post

Sample Data Entered

```sql
INSERT INTO Role (RoleID, RoleName) VALUES
(1, 'Admin'),
(2, 'Manager'),
(3, 'Employee'),
(4, 'HR'),
(5, 'Intern');


- Insert data into Department Table
INSERT INTO Department (DeptID, DeptName, DeptManager, NoofEmplo
(101, 'IT', 'John Doe', 20),
(102, 'Finance', 'Jane Smith', 15),
(103, 'Marketing', 'Mike Johnson', 25),
(104, 'HR', 'Sara Brown', 10),
(105, 'Operations', 'Tom Wilson', 30);


- Insert data into Candidate Table
INSERT INTO Candidate (CandidateID, CandidateName, CandidateEmai
(201, 'Alice Johnson', 'alice@email.com', '1234567890', '123 Mai
(202, 'Bob Smith', 'bob@email.com', '9876543210', '456 Oak St, `
(203, 'Charlie Brown', 'charlie@email.com', '5678901234', '789 I
(204, 'David Wilson', 'david@email.com', '3456789012', '234 Ced;
(205, 'Eva Davis', 'eva@email.com', '8765432109', '567 Elm St, S


- Insert data into JobPosition Table
INSERT INTO JobPosition (JobPositionID, JobPositionName) VALUES
(301, 'Software Developer'),
(302, 'Financial Analyst'),
(303, 'Marketing Specialist'),
(304, 'HR Manager'),
(305, 'Operations Supervisor');
```

```sql
- Insert data into Level Table
INSERT INTO Level (LevelID, LevelName) VALUES
(401, 'Entry Level'),
(402, 'Intermediate Level'),
(403, 'Senior Level'),
(404, 'Managerial Level'),
(405, 'Executive Level');


- Insert data into User Table
INSERT INTO User (UserID, UserName, Email, Password, UserRoleID
(501, 'admin_user', 'admin@email.com', 'admin123', 1),
(502, 'manager_user', 'manager@email.com', 'manager456', 2),
(503, 'employee_user', 'employee@email.com', 'employee789', 3),
(504, 'hr_user', 'hr@email.com', 'hr101', 4),
(505, 'intern_user', 'intern@email.com', 'intern202', 5);


- Insert data into JobVacancy Table
INSERT INTO JobVacancy (VacancyID, DepartmentID, JobPositionID,
(601, 102, 302, '2023-01-01', 'Closed'),
(602, 102, 302, '2023-02-01', 'Closed'),
(603, 102, 303, '2023-03-01', 'Closed'),
(604, 102, 303, '2023-04-01', 'Open'),
(605, 102, 304, '2023-05-01', 'Open');


- Insert data into JobApplication Table
INSERT INTO JobApplication (JobApplicationID, CandidateID, JobVa
(701, 201, 601, '2023-01-02', 'Accepted'),
(702, 202, 602, '2023-02-06', 'Accepted'),
(703, 203, 603, '2023-03-11', 'Rejected'),
(704, 204, 604, '2023-04-16', 'Pending'),
(705, 205, 605, '2023-05-21', 'Pending');
```

```sql
- Insert data into JobLevel Table
INSERT INTO JobLevel (JobLevelID, ApplicationID, LevelID, Status
(801, 701, 401, 'Accepted'),
(802, 702, 402, 'Accepted'),
(803, 703, 403, 'Rejected'),
(804, 704, 404, 'Pending'),
(805, 705, 405, 'Pending');
```

```sql
- Insert data into JobClearance Table
INSERT INTO JobClearance (JobClearanceID, JobLevelID, Status) VA
(901, 801, 'Approved'),
(902, 802, 'Approved'),
(903, 803, 'Rejected'),
(904, 804, 'Pending'),
(905, 805, 'Pending');
```

```sql
- Insert data into CandidateUserMapping Table
INSERT INTO CandidateUserMapping (CUMappID, CandidateID, UserID
(1001, 201, 503),
(1002, 202, 504),
(1003, 203, 505),
(1004, 204, 502),
(1005, 205, 501);
```

Query

```sql
SELECT
JV.VacancyID,
JV.Date AS VacancyDate,
JP.JobPositionName,
COUNT(JA.Status) AS SelectedCandidatesCount
FROM
```

```
JobVacancy JV
JOIN JobPosition JP ON JV.JobPositionID = JP.JobPositionID
JOIN JobApplication JA ON JV.VacancyID = JA.JobVacancyID
JOIN Department D ON JV.DepartmentID = D.DeptID
WHERE
D.DeptName = 'Finance'
AND YEAR(JV.Date) = 2023
AND JA.Status = 'Accepted'
GROUP BY
JV.VacancyID, JV.Date, JP.JobPositionName;
```

Output

VacancyID	VacancyDate	JobPositionName	SelectedCandidatesCount
601	2023-01-01	Financial Analyst	1
602	2023-02-01	Financial Analyst	1

Result Grid	Filter Rows:	Export:	Wrap Cell Content:

	VacancyID	VacancyDate	JobPositionName	SelectedCandidatesCount
▶	601	2023-01-01	Financial Analyst	1
	602	2023-02-01	Financial Analyst	1