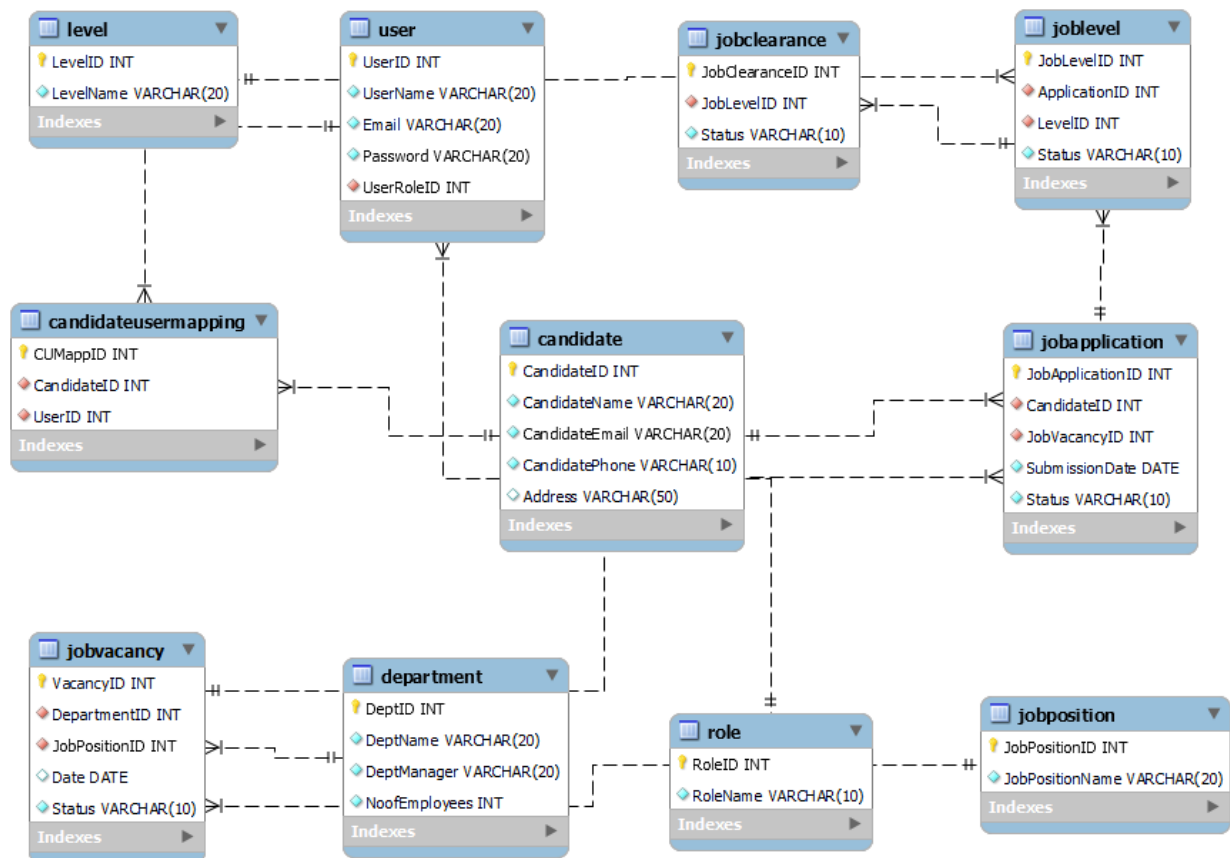


DB Task 3 - Querying

Submitted By,
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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

```
INSERT INTO Role (RoleID, RoleName) VALUES
(1, 'Admin'),
(2, 'Applicant');
```

- 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, CandidateEma
(201, 'Alice Johnson', 'alice@email.com', '1234567890', '123 Ma
(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, ';
```

- 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');
```

- Insert data into Level Table

```
INSERT INTO Level (LevelID, LevelName) VALUES
(401, 'Aptitude'),
```

```
(402, 'Technical Interview'),  
(403, 'HR Interview');
```

- Insert data into User Table

```
INSERT INTO User (UserID, UserName, Email, Password, UserRoleID,  
(501, 'admin_user', 'admin@email.com', 'admin123', 1),  
(502, 'alice', 'alice@email.com', 'applicant123', 2),  
(503, 'bob', 'bob@email.com', 'applicant123', 2),  
(504, 'charlie', 'charlie@email.com', 'applicant123', 2),  
(505, 'david', 'david@email.com', 'applicant123', 2),  
(506, 'eva', 'eva@email.com', 'applicant123', 2);
```

- 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, '2022-03-01', 'Closed'),  
(604, 104, 303, '2022-04-01', 'Open'),  
(605, 105, 304, '2024-05-01', 'Open');
```

- Insert data into JobApplication Table

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

- Insert data into JobLevel Table

```
INSERT INTO JobLevel (JobLevelID, ApplicationID, LevelID, Status)  
(801, 701, 401, 'Completed'),  
(802, 701, 402, 'Completed'),  
(803, 701, 403, 'Completed'),
```

```
(804, 702, 401, 'Completed'),
(805, 702, 402, 'Pending');
(806, 703, 401, 'Completed'),
(807, 703, 402, 'Completed');
(808, 704, 401, 'Completed'),
(809, 704, 402, 'Completed');
(810, 704, 403, 'Completed');
(811, 705, 401, 'Completed');
(812, 705, 402, 'Completed');
(813, 705, 403, 'Completed');
```

- Insert data into JobClearance Table

```
INSERT INTO JobClearance (JobClearanceID, JobLevelID, Status) V
(901, 803, 'Approved'),
(902, 810, 'Approved');
(903, 813, 'Approved');
```

- 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, 506);
```

Query

```
SELECT
    JV.VacancyID,
    JP.JobPositionName AS JobPosition,
    COUNT(JC.JobClearanceID) AS NumberOfCandidatesSelected
FROM
    JobVacancy JV
```

```

JOIN
    Department D ON JV.DepartmentID = D.DeptID
JOIN
    JobPosition JP ON JV.JobPositionID = JP.JobPositionID
LEFT JOIN
    JobApplication JA ON JV.VacancyID = JA.JobVacancyID
LEFT JOIN
    JobLevel JL ON JA.JobApplicationID = JL.ApplicationID
LEFT JOIN
    JobClearance JC ON JL.JobLevelID = JC.JobLevelID
WHERE
    D.DeptName = 'Finance'
    AND YEAR(JV.Date) = 2023
    AND JC.Status = 'Approved'
GROUP BY
    JV.VacancyID, JP.JobPositionName;

```

Output

VacancyID	JobPosition	NumberOfCandidatesSelected
601	Financial Analyst	2
602	Financial Analyst	1