Scenario: Job Recruitment Platform

"This platform connects Job Seekers with Companies that post Job Openings. Applicants apply to jobs, and recruiters can shortlist them for interviews."

Your Task Instructions

1. **Create a new GitHub repository and name it: SQL-JOINs-Practice**

2. **Use the provided script to create the database schema and insert sample data for the Job Recruitment Platform scenario. Make sure everything runs successfully before attempting the queries.**

3. **For each of the 15 JOIN tasks:**

   o Write a clear SQL query to answer the question

   o Add a comment above each query explaining what you're trying to do
   (e.g., Task 4: Show seekers who never applied)

   o (Optional) Include any observations or screenshots in your file

4. **Commit your work regularly with meaningful messages: Completed Task 5 - Job posting visibility**

If you face any challenge understanding a task or designing the query, take it step-by-step. Think logically about the relationships between tables before you write SQL.

Remember: Avoid copying full answers from AI. Focus on understanding how each JOIN connects the dots in a business process

Beginner Level (Conceptual Awareness)

Task 1 – "Who Got What?"

Your manager wants to review application statuses.

Show each applicant's full name, the job title they applied for, and the company name. Only include applicants who have actually applied.

➡ *Use INNER JOIN.*

Task 2 – "Empty Chairs"

Show all job titles and their company names, even if nobody has applied to them yet.

➡ *Use LEFT JOIN from Jobs → Applications.*

Task 3 – "Who Lives Where They Work?"

Find job seekers who applied to jobs in their **own city**.

Display job seeker name, job title, and matching city.

➡ *Use JOIN with matching condition on seeker.City = job.Location.*

Task 4 – "All Seekers with or without Applications"

List all job seekers and, if available, the job titles they applied to.

Show job seeker name, job title (if any), and application status (can be NULL).

➡ *Use LEFT JOIN from JobSeekers → Applications → Jobs.*

Task 5 – "Job Posting Visibility"

Show each job title with the name of the job seeker who applied (if any). If no one applied, still show the job title.

➡ *Use LEFT JOIN from Jobs → Applications → JobSeekers.*

Intermediate Level (Deeper Join Logic)

Task 6 – "Ghost Seekers"

Find the names and emails of job seekers who haven't applied to any job.
 Do not use NOT IN.

➡ *Use LEFT JOIN from JobSeekers → Applications, filter NULL.*

Task 7 – "Vacant Companies"

Find companies that have **no jobs** posted at all.

➡ *Use LEFT JOIN from Companies → Jobs, filter where job ID is NULL.*

Task 8 – "Same City, Different People"

List all pairs of job seekers who live in the **same city** but are not the same person.
Show: Seeker1 Name, Seeker2 Name, Shared City

➡ *Use SELF JOIN with condition: S1.City = S2.City AND S1.ID <> S2.ID*

Task 9 – "High Salary, Wrong City"

Find job seekers who applied to jobs with salaries above 850 **in a different city** than where they live.

➡ *Use JOIN + WHERE salary > 850 AND seeker.City <> job.Location*

Task 10 – "Unmatched Applications"

Show all job seekers and the job city they applied to, even if they live elsewhere.

➡ *JOIN JobSeekers → Applications → Jobs; show seeker name, seeker city, job location.*

Advanced Level

Task 11 – "Jobs With No Applicants"

Show all job titles where **no application has been submitted**.

➡ *Use LEFT JOIN from Jobs → Applications, filter where AppID IS NULL.*

Task 12 – "Applications From the Same City"

Find job seekers who applied to jobs **in the same city** they live in.

Show job seeker name, job title, and matching city.

➡ *Use JOIN with seeker.City = job.Location.*

Task 13 – "Different Job, Same City Applicants"

Find two job seekers who live in the same city but applied to **different jobs**.

➡ *Use SELF JOIN and JOIN on Applications and Jobs; make sure job IDs are different.*

Task 14 – "One-Way Interest"

Find all jobs applied to by seekers **not from the same city as the job**.

➡ *JOIN JobSeekers → Applications → Jobs, filter city mismatch.*

Task 15 – "Jobless City, Active People"

List cities where job seekers live but **no company is located** there.

➡ *Use LEFT JOIN from JobSeekers → Companies, filter where company.City IS NULL.*