

Task 8 (Joins Lab)

Company Database (the provided database) – JOIN Queries

1. Display the **department ID, department name, manager ID**, and the **full name of the manager**.
 2. Display the **names of departments** and the **names of the projects** they control.
 3. Display full data of all **dependents**, along with the **full name of the employee** they depend on.
 4. Display the **project ID, name**, and **location** of all projects located in **Cairo** or **Alex**.
 5. Display all **project data** where the project name **starts with the letter 'A'**.
 6. Display the **IDs and names of employees** in **department 30** with a **salary between 1000 and 2000 LE**.
 7. Retrieve the **names of employees** in **department 10** who work ≥ 10 **hours/week** on the **"AL Rabwah"** project.
 8. Find the **names of employees** who are directly **supervised by "Kamel Mohamed"**.
 9. Retrieve the **names of employees** and the **names of the projects** they work on, sorted by **project name**.
 10. For each **project located in Cairo**, display the **project number, controlling department name, manager's last name, address**, and **birthdate**.
 11. Display **all data of managers** in the company.
 12. Display **all employees and their dependents**, even if some employees **have no dependents**.
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University Database – JOIN Queries

1. Display the department ID, name, and the full name of the faculty managing it.
 2. Display each program's name and the name of the department offering it.
 3. Display the full student data and the full name of their faculty advisor.
 4. Display class IDs, course titles, and room locations for classes in buildings 'A' or 'B'.
 5. Display full data about courses whose titles start with "I" (e.g., "Introduction to...").
 6. Display names of students in program ID 3 whose GPA is between 2.5 and 3.5.
 7. Retrieve student names in the Engineering program who earned grades ≥ 90 in the "Database" course.
 8. Find names of students who are advised by "Dr. Ahmed Hassan".
 9. Retrieve each student's name and the titles of courses they are enrolled in, ordered by course title.
 10. For each class in Building 'Main', retrieve class ID, course name, department name, and faculty name teaching the class.
 11. Display all faculty members who manage any department.
 12. Display all students and their advisors' names, even if some students don't have advisors yet.
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Airline Database – JOIN Queries

1. Display each flight leg's ID, schedule, and the name of the airplane assigned to it.
2. Display all flight numbers and the names of the departure and arrival airports.
3. Display all reservation data with the name and phone of the customer who made each booking.
4. Display IDs and locations of flights departing from 'CAI' or 'DXB'.
5. Display full data of flights whose names start with 'A'.
6. List customers who have bookings with total payment between 3000 and 5000.

7. Retrieve all passengers on 'Flight 110' who booked more than 2 seats.
 8. Find names of passengers whose booking was handled by agent "Youssef Hamed".
 9. Display each passenger's name and the flights they booked, ordered by flight date.
 10. For each flight departing from 'Cairo', display the flight number, departure time, and airline name.
 11. Display all staff members who are assigned as supervisors for flights.
 12. Display all bookings and their related passengers, even if some bookings are unpaid.
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Hotel Database – JOIN Queries

1. Display hotel ID, name, and the name of its manager.
 2. Display hotel names and the rooms available under them.
 3. Display guest data along with the bookings they made.
 4. Display bookings for hotels in 'Hurghada' or 'Sharm El Sheikh'.
 5. Display all room records where room type starts with "S" (e.g., "Suite", "Single").
 6. List guests who booked rooms priced between 1500 and 2500 LE.
 7. Retrieve guest names who have bookings marked as 'Confirmed' in hotel "Hilton Downtown".
 8. Find guests whose bookings were handled by staff member "Mona Ali".
 9. Display each guest's name and the rooms they booked, ordered by room type.
 10. For each hotel in 'Cairo', display hotel ID, name, manager name, and contact info.
 11. Display all staff members who hold 'Manager' positions.
 12. Display all guests and their reviews, even if some guests haven't submitted any reviews.
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Bank Database – JOIN Queries

1. Display branch ID, name, and the name of the employee who manages it.
 2. Display branch names and the accounts opened under each.
 3. Display full customer details along with their loans.
 4. Display loan records where the loan office is in 'Alexandria' or 'Giza'.
 5. Display account data where the type starts with "S" (e.g., "Savings").
 6. List customers with accounts having balances between 20,000 and 50,000.
 7. Retrieve customer names who borrowed more than 100,000 LE from 'Cairo Main Branch'.
 8. Find all customers assisted by employee "Amira Khaled".
 9. Display each customer's name and the accounts they hold, sorted by account type.
 10. For each loan issued in Cairo, show loan ID, customer name, employee handling it, and branch name.
 11. Display all employees who manage any branch.
 12. Display all customers and their transactions, even if some customers have no transactions yet.
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Library Database – JOIN Queries

1. Display library ID, name, and the name of the manager.
2. Display library names and the books available in each one.
3. Display all member data along with their loan history.
4. Display all books located in 'Zamalek' or 'Downtown'.
5. Display all books whose titles start with 'T'.
6. List members who borrowed books priced between 100 and 300 LE.
7. Retrieve members who borrowed and returned books titled 'The Alchemist'.
8. Find all members assisted by librarian "Sarah Fathy".
9. Display each member's name and the books they borrowed, ordered by book title.
10. For each book located in 'Cairo Branch', show title, library name, manager, and shelf info.
11. Display all staff members who manage libraries.
12. Display all members and their reviews, even if some didn't submit any review yet.