**Stage 1: SQL Basics**

**1. Basic SQL Syntax: SELECT, WHERE, and Operators**

**Practice Questions:**

* Retrieve all the employees' names and their salaries from the Employees table.
* Retrieve employees who have a salary greater than 80,000.
* Find employees whose names start with "J" (Use the LIKE operator).
* Retrieve the departments with a salary range between 60,000 and 90,000.

**2. Sorting Data with ORDER BY**

**Practice Questions:**

* Retrieve all employee names sorted by their salaries in descending order.
* Retrieve all employees' names and ages, sorted by their age in ascending order.
* List all departments sorted by department name in alphabetical order.

**3. Aggregating Data with GROUP BY and Aggregate Functions**

**Practice Questions:**

* Find the total salary of all employees.
* Count how many employees are in each department.
* Find the average salary for each department.
* Get the highest and lowest salaries among all employees.

**Stage 2: Intermediate SQL**

**4. Joins: INNER JOIN, LEFT JOIN, RIGHT JOIN, FULL JOIN**

**Practice Questions:**

* Retrieve a list of employees with their department names.
* Find employees who have been assigned to a project, using INNER JOIN.
* Get all employees and their departments, including employees who haven’t been assigned to any department (Use LEFT JOIN).
* List employees who haven’t been assigned to any task (Use LEFT JOIN with Tasks table).

**5. Subqueries: Nested Queries**

**Practice Questions:**

* Find employees who have a higher salary than the average salary of all employees.
* Retrieve the names of employees who have not attended any training programs.
* Get the employee who has the maximum salary in each department.

**6. Set Operations: UNION, INTERSECT, and EXCEPT**

**Practice Questions:**

* List all employees and project names from the Employees and Projects tables.
* Get a list of employees who are either assigned to a task or training program (Use UNION).
* Find employees who have been assigned to a task but not to a project (Use EXCEPT).

**Stage 3: Advanced SQL Concepts (Enhancing your skill set)**

**7. Indexes and Performance Optimization**

**Practice Questions:**

* Create an index on the Salary column of the Employees table.
* Retrieve all employees with salary over 60,000 using indexed columns.

**8. Transactions and ACID Properties**

**Practice Questions:**

* Start a transaction where you update the salary of an employee. If something goes wrong, roll back the transaction.
* Add a transaction to update employee salary and insert into the Salary table at the same time. Make sure it commits successfully.