Here are 25 SQL practice assignments based on the concepts you've learned. The difficulty increases gradually, combining multiple topics in later assignments. Use the W3Schools "Try It" editor or your SQL environment for practice.

**Easy Level**

1. **Basic SELECT and FROM**
   * Retrieve all columns from the students table.
   * Retrieve only the name and age columns from the students table.
2. **TOP and PERCENT**
   * Retrieve the top 3 rows of the students table.
   * Retrieve the top 20% of rows from the students table.
3. **DISTINCT and ORDER BY**
   * Get distinct age values from the students table.
   * List all students in ascending order of name.
4. **WHERE Clause**
   * Retrieve all students older than 18.
   * Retrieve students whose age is not between 15 and 20.
5. **IS NULL and IS NOT NULL**
   * Find all students whose name is NULL.
   * Exclude students with NULL values in the age column.

**Moderate Level**

1. **Multiple Conditions**
   * Retrieve students older than 15 and whose gender is 'Female'.
   * Retrieve students older than 15 or whose gender is 'Male'.
2. **IN and LIKE**
   * Find employees in departments 'HR' or 'IT'.
   * Retrieve employees whose names contain the substring 'son'.
3. **Aggregation**
   * Calculate the total salary of all employees.
   * Find the average age of all students.
4. **MIN, MAX, and COUNT**
   * Retrieve the minimum and maximum salary from the employees table.
   * Count the total number of students.
5. **LEN, LEFT, RIGHT, and CHARINDEX**
   * Find the length of all employee names.
   * Extract the first 3 characters of all employee names.
   * Find the position of the substring 'SQL' in the text 'Learn SQL with ease'.

**Advanced Level**

1. **JOINs**
   * Use INNER JOIN to find all albums with their artist names.
   * Use LEFT JOIN to find all albums and include NULL for artists with no matching albums.
2. **GROUP BY and HAVING**
   * Count the number of employees in each department.
   * Find departments where the total salary exceeds 10,000.
3. **Subqueries**
   * Find the name of the employee with the highest salary.
   * Retrieve students whose ages are above the average age.
4. **Using REPLACE**
   * Replace 'Male' with 'M' and 'Female' with 'F' in the gender column.
5. **Nested Queries**
   * Retrieve all students who are in the top 5 by age.
   * Find employees whose salaries are higher than the average salary of their department.

**Challenging Level**

1. **Multi-Table Queries**
   * Retrieve all courses each student is enrolled in using JOIN.
   * Find students who are not enrolled in any course.
2. **Combining Aggregate Functions**
   * Calculate the total and average salary in one query.
3. **Complex Conditions**
   * Retrieve employees whose name starts with 'J' or contains 'son', but exclude those whose names end with 'y'.
4. **Using BETWEEN with Dates**
   * Retrieve employees hired between '2020-01-01' and '2022-12-31'.
5. **Advanced GROUP BY**
   * Find the top 3 departments with the highest total salaries.
6. **Nested Joins**
   * Retrieve all albums with their artists and the number of tracks in each album.
7. **SELF JOIN**
   * Find pairs of employees working in the same department.
8. **UNION**
   * Combine two queries: one retrieving employees from 'HR' and another retrieving employees from 'IT'.
9. **CASE Statements**
   * Add a column that categorizes students as 'Minor' or 'Adult' based on age.
10. **Data Modification**
    * Update the students table to set age to NULL for students whose name starts with 'A'.

Try these out, and let me know if you need any hints or explanations!