SQL Assignment

Instructions:
- Write SQL queries to solve each of the following questions.
- Use the database schema and data provided in your database for reference.
- If you need to make any assumptions about the database schema, please state them explicitly.
- You can include brief explanations with your queries if needed.

Database Schema:

Consider a database with the following tables:

1. `Employees` Table
   - Columns: `EmployeeID` (Primary Key), `FirstName`, `LastName`, `DepartmentID`

2. `Departments` Table
   - Columns: `DepartmentID` (Primary Key), `DepartmentName`

3. `Orders` Table
   - Columns: `OrderID` (Primary Key), `CustomerID`, `OrderDate`

4. `OrderDetails` Table
   - Columns: `OrderDetailID` (Primary Key), `OrderID`, `ProductID`, `Quantity`

5. `Products` Table
   - Columns: `ProductID` (Primary Key), `ProductName`, `UnitPrice`

Questions:

1. Retrieve the first and last names of all employees.

2. Find the total number of employees in each department.

3. List the names of departments that have no employees.

4. Retrieve the details of the employee with the highest `EmployeeID`.

5. Calculate the average quantity of products ordered in the `OrderDetails` table.

6. List the names of employees who have placed orders.

7. Find the total number of orders placed in each year.

8. Retrieve the product names that have never been ordered.

9. List the employees who have the same first name as their department.

10. Calculate the total price of products sold in each order.

11. Find the customer who placed the largest total value of orders.

12. Retrieve the employee with the highest total quantity of products ordered.

13. List the departments with more than five employees.

14. Calculate the average unit price of products in each department.

15. Retrieve the order with the highest total price.

16. List the employees who have not placed any orders.

17. Calculate the total revenue generated by each product.

18. Find the products that have been ordered more than 100 times.

19. List the employees who have placed orders on weekends (Saturday or Sunday).

20. Retrieve the product that has the highest total revenue.

Good luck with your SQL assignment!