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DAD-220
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DAD 220 Module Two Activity Template

1. How many records are shown in the Employee table?
    - There are 5 records shown in the Employee table.

2. How many attributes are there in the Branches table?
    - There are 2 attributes in the Branches table: Department_ID and Department_Name.

3. Which attribute could be a primary key for the Employee table?
    - The Employee_ID attribute could be a primary key for the Employee table, assuming it contains unique values for each employee.

4. How many decimal places (maximum) can be stored in an employee's salary field?
    - The employee's salary field can store a maximum of 2 decimal places.

5. How many decimal places (maximum) can a Department_ID have?
    - The Department_ID is defined as SMALLINT, which typically does not store decimal places. It stores whole numbers (integers) without decimal places.

6. What three rules do tables obey?
    - Tables in a relational database obey the three rules of the relational model:
        - Tables are normalized.
        - Each column in a table must have a unique name.
        - No duplicate rows.

7. Is the Employee table normalized? How do you know?
    - It is normalized because there is only one value per cell.

8. What is the result of the following query?
    - Select sum(Salary) from Employee where Department_ID=3;

o The result would be the sum of salaries for employees in Department_ID 3. Calculation: 80000.0 (Michael Jones) + 90000.0 (John Smith) = 170000.0

9. Identify the Employee ID(s) that would be returned as a result of the following query.
- Select * from Employee where Classification <> 'Exempt';
  - o The Employee ID(s) returned would be those of employees whose Classification is not 'Exempt.' In this case, Employee_ID 101 (Mary Jones) and Employee_ID 104 (Michael Jones) would be returned.

10. What is the result of the following query?
- Select max(Salary) from Employee;
  - o The result would be the maximum (highest) salary among all employees in the Employee table.
  - o Maximum Salary: 90000.0 (John Smith and Michael Jones both have this salary).