**Views**

**Part 1 Use CompanyDB:**

1. Create a view that shows the project number and name along with the total number of hours worked on each project.
2. Create a view that displays the project number and name along with the name of the department managing the project.
3. Create a view that displays the names and salaries of employees who earn more than their managers.
4. Create a view that displays the department number, name, and the number of employees in each department.
5. Create a view that lists the project name, location, and the name of the department managing the project, but exclude projects without a department.
6. Create a view that displays the average salary of employees in each department, along with the department name.
7. Create a view that displays the names of employees who have dependents, along with the number of dependents each employee has.
8. Create a view that shows the project name and location along with the name of the department managing the project, ordered by project number.
9. Create a view that displays the full name (first name and last name), salary, and the name of the department for employees working in the department with the highest average salary.
10. Create a view that lists the names and ages of employees and their dependents (if any) in a single result set. The age should be calculated based on the current date.
11. Create a view that shows the project number, name, location, and the number of employees working on each project, but exclude projects with no employees.
12. Create a view that displays the names and salaries of employees who earn more than the average salary of their department.
13. Create a view that displays the names and salaries of employees who have dependents, along with the number of dependents each employee has.

**Part 2**

Use CompanyDB:

1. Make a rule that makes sure the value is less than 1000 then bind it on the Salary in Employee table.
2. Create a new user data type named loc with the following Criteria:

• nchar(2)

• default: NY

• create a rule for this Datatype :values in (NY,DS,KW)) and associate it to the location column

1. Create a New table Named newStudent, and use the new UDD on it you just have made and ID column and don’t make it identity.
2. Create a new sequence for the ID values of the previous table.
   1. Insert 3 records in the table using the sequence.
   2. Delete the second row of the table.
   3. Insert 2 other records using the sequence.
   4. Can you insert another record without using the sequence? Try it!

Can you do the same if it was an identity column?

* 1. Can you edit the value if the ID column in any of the inserted records? Try it!

Can you do the same if it was an identity column?

* 1. Can you use the same sequence to insert in another table?
  2. If yes, do you think that the sequence will start from its initial value in the new table and insert the same IDs that were inserted in the old table?
  3. How to skip some values from the sequence not to be inserted in the table? Try it.

Can you do the same with the Identity column?

* 1. What’re the differences between the Identity column and Sequence?