System Requirements Specification Index

For

Relational Database

Version 1.0

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Problem Statement : Simple to complex SQL queries using MySQL.

Description : This assessment contains SQL queries on the Employees database.

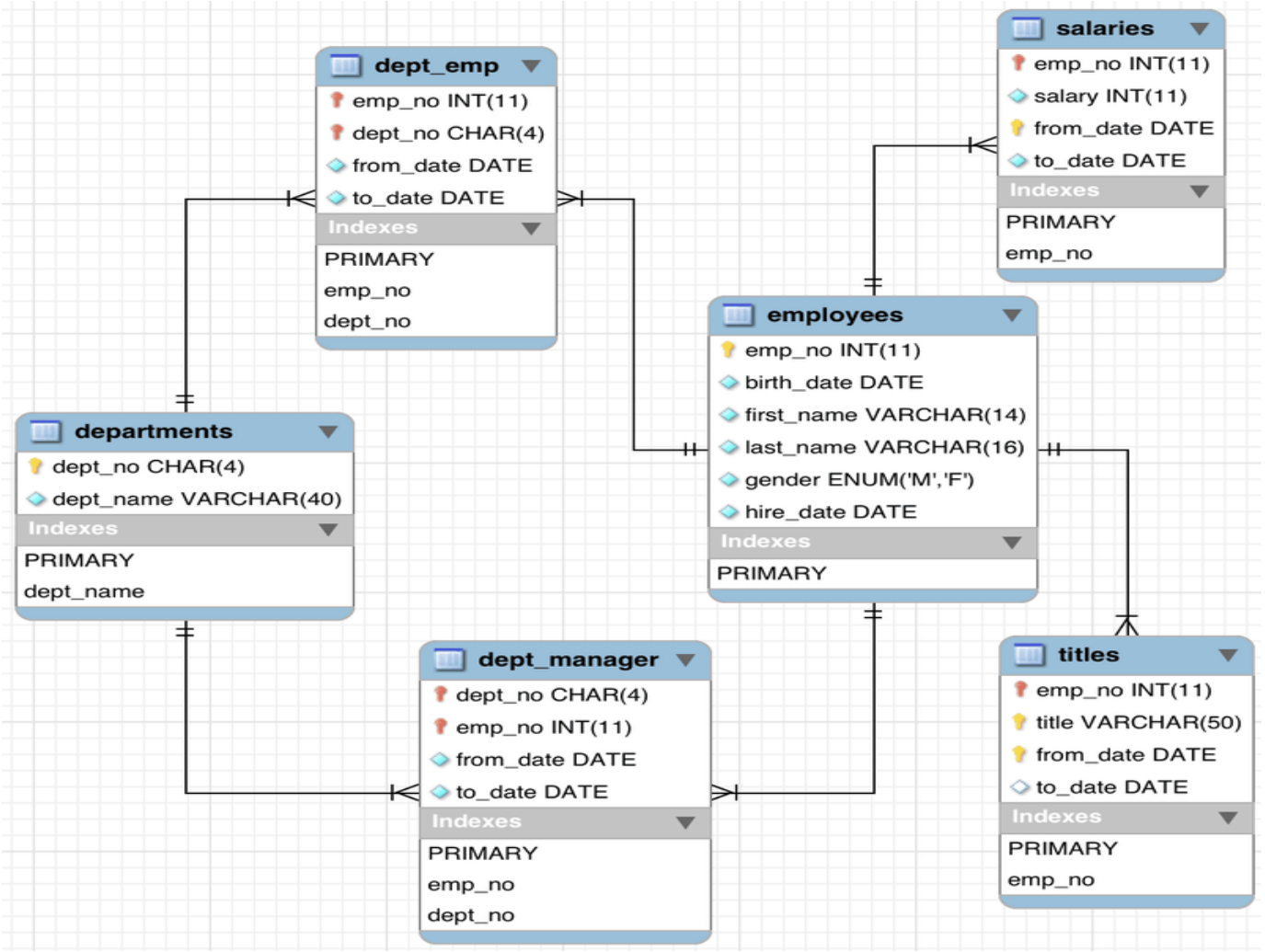
The solution contains the following folder structure.

MySQL |

|--tests – contains unit testcases for the solution

|-- requirements.txt

Employees database has the following tables and relationships as below.



Questions:

1. Create a view “view1” which returns employee details (emp_no, first_name<space>lastname, title, dept_name) ordered by emp_no.

2. Create a view “view2” which returns the max salary each employee has earned in their tenure ordered by emp_no.

(emp_no, first_name<space>lastname, salary)

3. Create a view “view3” which returns employee details and last job title that they held ordered by emp_no

(emp_no, first_name<space>lastname, title, dept_name, from_date, to_date)

4. Create a view “view4” which returns last manager they worked with

(emp_no, first_name<space>lastname, dept_no, manager_name)

5. Create a view “view5” which returns the last title and the last manager they worked with

(emp_no, first_name<space>lastname, title, dept_no, dept_name, manager_name, from_date, to_date)

6. Create a view “view6” which returns emp_no who has more than one job title since their joining ordered by emp_no, return the titles as a column(separated by ','s)

(emp_no, titles)

Ex: 1 Title1,Title2

7. Create a view “view7” which returns the max salary each employee has earned in their tenure in the year 2000 ordered by emp_no.

(emp_no, first_name<space>lastname, salary,from_date, to_date)

8. Create a view “view8” which returns year of each employee when they earned least salary ordered by emp_no

(emp_no, name, salary, period)

Ex: 1, abc, 123, 1999-2000

Execution Steps to Follow:

1. Open python terminal from Terminal option, make sure you are running with python>=**3.6** and have the latest **pip** installed.

2. To run application for use case use following command(please install other python packages as you need)

    a) cd into project folder<MySQL>

    b)pip install -r requirements.txt --user

    c) (optional)install any required libraries by – pip install pymodule --user

3. Once you implement all methods, do

    a) pip-chill --no-version >> requirements.txt

4. On command prompt, cd into your project folder (cd <MySQL>), before running unit tests, do

    pip install -r requirements.txt --user

5. **Mandatory**: Before final submission run the following command:

    a) cd into project folder<MySQL>

    b) python -m pytest tests

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