|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Experiment No: | 1 |  |  |  |  |  | TE IT | |
| Date of Performance: | |  |  |  |  |  | Roll No: | |
| Aim: To execute complex SQL queries in Posgresql | | | | | | | | |
| **Related CO:** Implement simple query optimizers and design alternate efficient paths for query execution**.** | | | | | | | | |
| **Rubrics for assessment of Experiment:** | | | |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| **Sr. No** | **Parameters** | **Exceed** | |  | **Meet** | | **Below** | |
|  |  | **Expectations(EE)** | | | **Expectations** | | **Expectations** | |
|  |  |  |  |  | **(ME)** | | **(BE)** | |
| 1 | Timeline (2) | Early or on time | | | One session late | | More than one | |
|  |  | (2) |  |  | (1) |  | session late (0) | |
| 2 | Preparedness (2) | Knows the basic | | | Managed to | | Not aware of the | |
|  |  | theory related to | | | explain the | | theory to the | |
|  |  | the experiment | | | theory related to | | point. (1) | |
|  |  | very well. (2) | |  | the experiment. | |  |  |
|  |  |  |  |  | (1) |  |  |  |
| 3 | Effort (3) | Done expt on their | | | Done expt with | | Just managed. | |
|  |  | own. (3) | |  | help from other. | | (1) |  |
|  |  |  |  |  | (2) |  |  |  |
| 4 | Documentation(2) | Lab experiment is | | | Documented in | | Experiments not | |
|  |  | documented in | | | proper format | | written in | |
|  |  | proper format and | | | but some | | proper format | |
|  |  | maintained neatly. | | | formatting | | (0.5) |  |
|  |  | (2) |  |  | guidelines are | |  |  |
|  |  |  |  |  | missed. (1) | |  |  |
| 5 | Result (1) | Specific | |  | Partially | | Not specific at | |
|  |  | conclusion.(1) | | | specific | | all. (0) | |
|  |  |  |  |  | conclusion. | |  |  |
|  |  |  |  |  | (0.5) |  |  |  |
| **Assessment Marks:** | |  |  |  |  |  |  |  |
|  |  |  |  |  | |  | |  |
| Timeline(2) | Preparedness(2) | Effort(3) |  | Documentation(2) | | Result(1) | | Total(10) |
|  |  |  |  |  |  |  |  |  |

**Teacher’s Sign:**

|  |  |
| --- | --- |
| TE IT | Roll No. |
| **Experiment No**: 1 | Date of implementation: |

**Aim:** To Implement complex SQL Quries in Posgresql

**Related CO:** Implement simple query optimizers and design alternate efficient paths for query execution**.**

**Theory**:Write about the constructs used in the below mentioned queries

**Questions:**

1. **Find the total capacity of every building in the university**
2. **Find the id and title of all courses which do not require any prerequisites.**
3. **Find the names of students who have not taken any biology dept courses**

**Post Lab Questions:**

**1. Find the names of all students who have taken at least one Comp. Sci. course; make sure there are no duplicate names in the result**

**2. For each department, find the maximum salary of instructors in that department. You may**

**assume that every department has at least one instructor. Also find the lowest, across all**

**departments, of the per-department maximum salary computed.**