**Experiment 3.1**

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**Branch:   CC-DevOps                                                        Section/Group: 1/B**

**Semester:   I                                                               Date of Performance: 01/12/2022**

**Subject Name: ADBMS                     Subject Code: 22CAP-647**

1. **Task to be done:**

**You are given a table, *Projects*, containing three columns: *Task\_ID*, *Start\_Date* and *End\_Date*.**

**It is guaranteed that the difference between the *End\_Date* and the *Start\_Date* is equal to *1* day for each row in the table.**

**If the *End\_Date* of the tasks are consecutive, then they are part of the same**

**project. Samantha is interested in finding the total number of different projects**

**completed.**

**Write a query to output the start and end dates of projects listed by the number of days it took to complete the project in ascending order. If there is more than one project that have the same number of completion days, then order by the start date of the project.**

**Query :**

**Mysql>** Select Start\_Date, MIN(End\_Date)

From

(Select b.Start\_Date

From Projects as a

RIGHT Join Projects as b

ON b.Start\_Date = a.End\_Date

WHERE a.Start\_Date IS NULL

) sd,

(Select a.End\_Date

From Projects as a

Left Join Projects as b

ON b.Start\_Date = a.End\_Date

WHERE b.End\_Date IS NULL

) ed

Where Start\_Date < End\_Date

GROUP BY Start\_Date

ORDER BY datediff(MIN(End\_Date), Start\_Date), Start\_Date

**Output:**

+------------+---------------+

| Start\_Date | MIN(End\_Date) |

+------------+---------------+

| 2015-10-28 | 2015-10-29 |

| 2015-10-30 | 2015-10-31 |

| 2015-10-13 | 2015-10-15 |

| 2015-10-01 | 2015-10-04 |

+------------+---------------+

**4 rows in set (0.00 sec)**

1. **Learning outcomes (What I have learnt):** 
   * 1. **Learn about Aggregate function**
     2. **Learn about group by clause**
     3. **Learn about having clause with aggregate functions**

**Evaluation Grid:**

|  |  |  |  |
| --- | --- | --- | --- |
| Sr. No. | Parameters | Marks Obtained | Maximum Marks |
| 1. | Demonstration and Performance  (Quiz) |  | 22 |
| 2. | Worksheet |  | 8 |