

Day 2

Problem Statement:

If the End_Date of the tasks are consecutive, then they are part of the same project. Ivy 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.

Solution Code:

```
SELECT Start_Date, MIN(End_Date) as End_Date FROM
```

```
(SELECT Start_Date FROM time_sample WHERE Start_Date NOT IN (SELECT End_Date FROM  
time_sample)) AS T1,
```

```
(SELECT End_Date FROM time_sample WHERE End_Date NOT IN (SELECT Start_Date FROM  
time_sample)) AS T2
```

```
WHERE Start_Date < End_Date
```

```
GROUP BY Start_Date
```

```
ORDER BY DATEDIFF(MIN(End_Date), Start_Date), Start_Date;
```

Screenshot of the Code:

The screenshot shows the MySQL Workbench interface. The left sidebar displays the 'SCHEMAS' tree with 'sakila', 'student', 'student_db1', 'sys', 'taxi', and 'time_diff_stamp' listed. The 'time_diff_stamp' schema is selected, showing its tables, views, stored procedures, and functions. The main editor window shows a SQL query file with the following code:

```
16 ;
17 /*Displaying the table*/
18 • select * from time_sample;
19 /*Write a query to output the start and end dates of projects listed by the number of
20 days it took to complete the project in ascending order.
21 If there is more than one project that have the same number of completion days,then order by the start date of the project.*/
22
23 • SELECT Start_Date, MIN(End_Date) as End_Date FROM
24 (SELECT Start_Date FROM time_sample WHERE Start_Date NOT IN (SELECT End_Date FROM time_sample)) AS T1,
25 (SELECT End_Date FROM time_sample WHERE End_Date NOT IN (SELECT Start_Date FROM time_sample)) AS T2
26 WHERE Start_Date < End_Date
27 GROUP BY Start_Date
28 ORDER BY DATEDIFF(MIN(End_Date), Start_Date), Start_Date;
```

The bottom panel shows the 'Result Grid' with 8 rows of data. The first two columns are 'Start_Date' and 'End_Date'.

Start_Date	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