

Monthly-Report Date Range Calculation

Goals:

- Algorithm development
- Problem solving
- Submitting solutions on EASEL

Scenario: Activity reports are generated for MS State Police Troops periodically for a selected month. The reports include activity for the selected month, the same month in the previous year, and the previous month to the one selected. These reports are generated using SQL Server software.

Input: Within the `select date(“”)` quotation marks, illustrated in the examples below, you should enter a date that is either the first or last day of a given month. You should type these dates in the format “YYYY-MM-DD”. This date is meant to represent the selected month.

Output: (values you need to calculate)

- The date of the first day of the previous month.
- The date of the last day of the previous month.
- The date of the first day of the same month in the previous year.
- The date of the last day of the same month in the previous year.

Obstacles:

- Not all months have the same number of days.
- February does not always have the same number of days.

Primitive:

- Addition and subtraction of days, months and years from a date

Example Date operations:

```
select date();
select date("2000-05-01");
select date("2000-05-01", "+1 days");
select date("2000-05-01", "+1 months");
select date("2000-05-01", "+1 years");
select date("2000-05-01", "-1 days");
select date("2000-05-01", "-1 months");
select date("2000-05-01", "-1 years");
select date("2000-05-01", "-1 years", "+5 days", "-2 months");
select date("2000-05-01", "-1 years", "+5 days", "-2 months");
```

```
select date();
select date("2000-05-31");
select date("2000-05-31", "+1 days");
select date("2000-05-31", "+1 months");
select date("2000-05-31", "+1 years");
select date("2000-05-31", "-1 days");
select date("2000-05-31", "-1 months");
select date("2000-05-31", "-1 years");
select date("2000-05-31", "-1 years", "+5 days", "-2 months");
select date("2000-05-31", "-1 years", "+5 days", "-2 months");
```

You will have 4 of these lines when you are done, each with its own output corresponding to the output requested.

Test your solution: For the sake of this assignment we are going to use sqlite syntax at http://www.compileonline.com/execute_sql_online.php.

Submit your solution: at <https://cs.harding.edu> as a text file. Be sure to view your submission to make sure it is readable after uploading it.