

Day – 17

SQL PGEXERCISE

For any given timestamp, work out the number of days remaining in the month. The current day should count as a whole day, regardless of the time. Use '2012-02-11 01:00:00' as an example timestamp for the purposes of making the answer. Format the output as a single interval value.

```
select (date_trunc('month' , ts.testts) + interval '1 month')  
- date_trunc('day' , ts.testts) as remaining from  
(select timestamp '2012-02-11 01:00:00' as testts)ts ;
```

Return a list of the start and end time of the last 10 bookings (ordered by the time at which they end, followed by the time at which they start) in the system.

```
select starttime , starttime + slots* (interval '30 minutes') endtime  
from cd.bookings order by endtime desc , starttime desc limit 10;
```

Return a count of bookings for each month, sorted by month

```
select date_trunc('month' , starttime) as month , count(*)  
from cd.bookings  
group by month  
order by month
```

Work out the utilization percentage for each facility by month, sorted by name and month, rounded to 1 decimal place. Opening time is 8am, closing time is 8.30pm. You can treat every month as a full month, regardless of if there were some dates the club was not open.

```
select name, month,
       round((100*slots)/
            cast(
                25*(cast((month + interval '1 month') as date)
                - cast (month as date)) as numeric),1) as utilisation
from (
    select facs.name as name, date_trunc('month', starttime) as month, sum(slots)
as slots
    from cd.bookings bks
    inner join cd.facilities facs
        on bks.facid = facs.facid
    group by facs.facid, month
) as inn
order by name, month
```