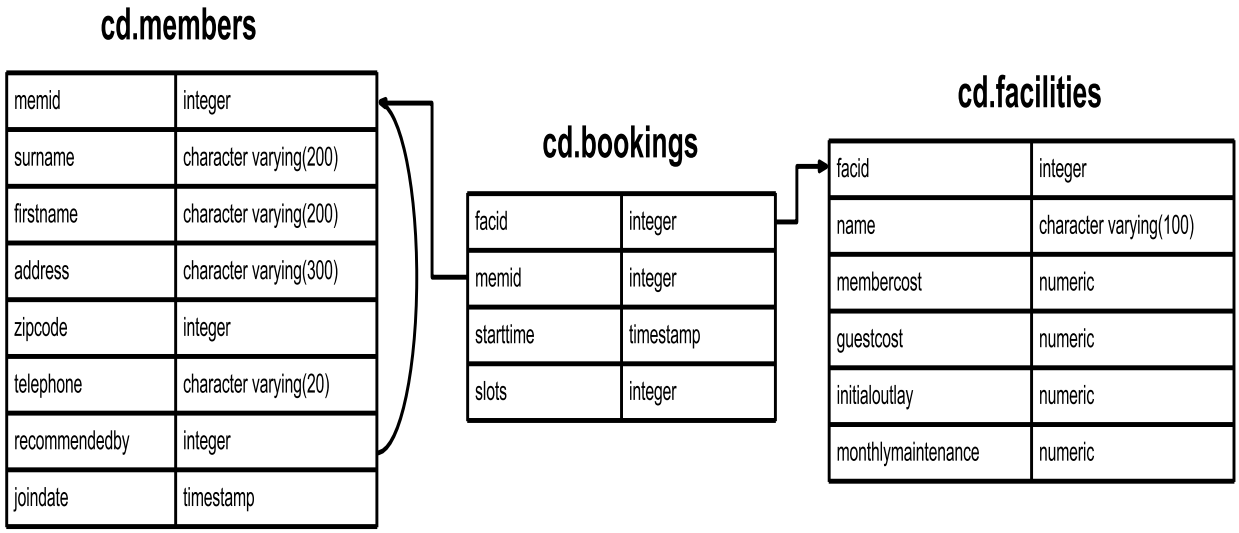
Day-16

SQL Date

PGEXERCISE.COM



Exercise :- https://pgexercises.com/questions/date/

1. **Produce a timestamp for 1 a.m. on the 31st of August 2012.**

```
select cast ('2012-08-31 01:00:00' as timestamp);
```

2. **Find the result of subtracting the timestamp '2012-07-30 01:00:00' from the timestamp '2012-08-31 01:00:00'**

```
select  timestamp '2012-08-31 01:00:00' - timestamp  '2012-07-30 01:00:00'   as interval;
```

3. **Produce a list of all the dates in October 2012. They can be output as a timestamp (with time set to midnight) or a date.**

```
select generate_series(timestamp '2012-10-01' , timestamp '2012-10-31',
interval '1 day') as ts;
```

4. **Get the day of the month from the timestamp '2012-08-31' as an integer.**

```
select extract(day from timestamp '2012-08-31');
```

5. **Work out the number of seconds between the timestamps '2012-08-31 01:00:00' and '2012-09-02 00:00:00'**

```
select extract(day from ts.int)*60*60*24 +
 extract(hour from ts.int) * 60 * 60  +
 extract (minute from ts.int) * 60 +
 extract( second from ts.int)
from  (

  select timestamp  '2012-09-02 00:00:00' - '2012-08-31 01:00:00' as int ) ts;
```

6. **For each month of the year in 2012, output the number of days in that month. Format the output as an integer column containing the month of the year, and a second column containing an interval data type.**

```
select extract(month from cal.month) as month ,
(cal.month + interval '1 month')-cal.month as length
from
```

```
(
select generate_series(timestamp '2012-01-01' , timestamp '2012-12-01' ,
interval '1 month') as month
 ) cal order by month ;
```