In this exercise we will do a simple select query with predicates and case expression. This exercise will teach you how to filter the data using predicates. And we will do a simple transformation of data. We will use the sales from the superstore dataset. Here is the requirements, get all the records in 2017, where category is furniture and segment is 'Corporate' and 'Home Office'. Then derive﻿ the field profit if it is a even, gain or loss. Let’s start, go to pgadmin. First we will select all columns and filter the records by order date, type in:

**select \* from superstore\_sales where order\_date between '2017-01-01' and '2017-12-31'**

then run the query, now we get all the records from 2017 with 3312 records.

Let’s proceed with the next requirement which is filtering the records with category is furniture. On the current query at the end of the query type in:

**and category = ‘Furniture’**

then run the query again. Notice that the records were reduce to 686 rows since we added a criteria category which is furniture. Moving on to the next requirement which is segment is 'Corporate' and 'Home Office' will do this using the IN operator. At the end of the query type in:

**and segment in ('Corporate','Home Office')**

then run the query we now have 334 records.

All the filter criteria are added the last thing to do now is to add the derived field. On the current query after the asterisk type in:

**, case when profit = 0 then 'Even' when profit>0 then 'Gain' else 'Loss' end**

Then run the query. As you can see on the results grid we have now added a new field which returns even, gain or loss depending on the profit fields value.