**CS689 Assignment 3**

Q. Explain elapsed date dimension

This is a date-time dimension which is based on the intervals between one or more dates. This dimension is useful to find out since how long an employee has been employed. There is no usage of absolute dates in this dimension.

Q. How does the pay\_change\_facts table refer to each dimension.

On inspecting the scripts it is very clear, these attributes are used in the current warehouse to connect forward. That is as follows :-

Employee\_dimension 🡪 employee\_key with FK employee\_key

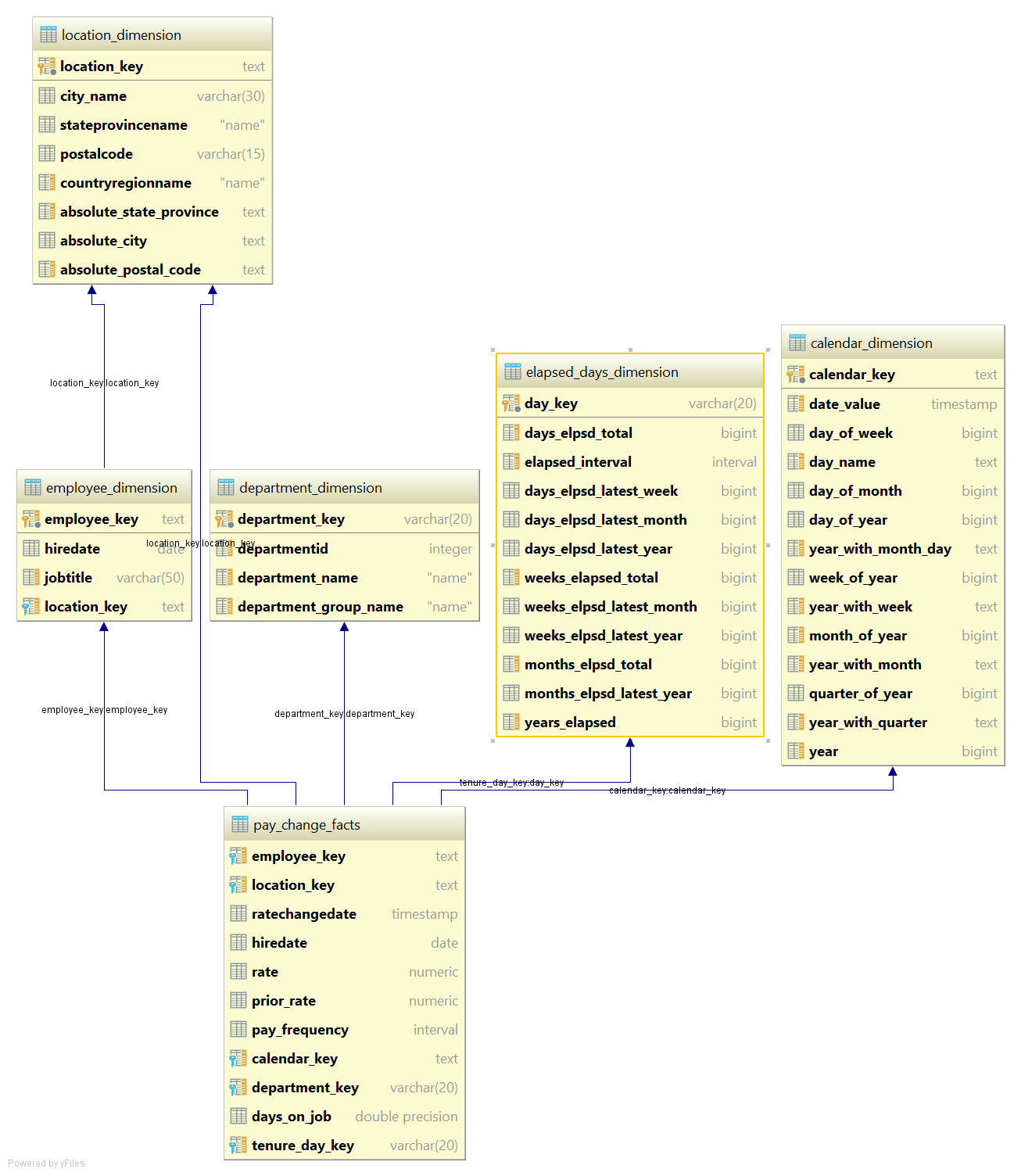
Location\_dimension 🡪 location\_key with FK location\_key

Calendar\_dimension 🡪 calender\_key with FK calender\_key

Elapsed\_days\_dimension 🡪 day\_key with FK tenure\_day\_key

Department\_dimension 🡪 department\_key with FK department\_key

The alter command at the end of the script is what makes these foreign key constraints available.

One can use these foreign key references and the diagram below to understand the schema of warehouse.

Q. Run each query in the script \*\*when\\_are\\_there\\_pay\_changes.sql\*\*. Examine the results. What do the queries tell us about pay changes?

Query 1:

The query calculates and groups number of employees based on ratechangeddate > hireddate condition, assuming rate change date is the date when the got a raise on salary.

Calculates the number of employees who have received the rate change corresponding to the total number of months elapsed it took to get that rate change.

Query 2:

Is same as above but instead of number of months, it uses the months elapsed from latest year field in order to GROUP BY.