**Relation Schema:**

**Employer master** (**Employer\_No**: INT, **Effective\_From**: DATE, **Effective\_To**: DATE, **Status**: STRING, **Tier**: INT)

**Payment transactions** (**Employer\_No**: INT, **Cash\_Received\_Date**: DATE, **Total\_Amt**: FLOAT)

After observation, I found that **Employer\_No** attribute in **Employer master** table is an int with six digits, which is the foreign key. **Effective\_From** and **Effective\_To** attributes in **Employer master** table are date format. **Status** attribute in **Employer master** table is a string, which has two values – Open and Closed. **Tier** attribute in **Employer master** table is an int with one digit.

While, **Employer\_No** attribute in **Payment transactions** table is an int with six digits, which is the foreign key. **Cash\_Received\_Date** attribute in **Payment transactions** table is date format. **Total\_Amt** attribute in **Payment transactions** table is a float.

**Assumption:**

**Tier** attribute in **Employer master** table is currently observed to be a integer from 1 to 4, but it is possible that it will change in the future.

It can be seen that **Effective\_From** attribute for each identical **Employer\_No** attribute in **Employer master** table is sorted in ascending order.

The date type of **Effective\_From** and **Effective\_To** attributes in **Employer master** table and **Cash\_Received\_Date** attribute in **Payment transactions** table is not in consistency. So if integrate these two table, date format should be pre-processed.

**Approach:**

During this test, I generate a new table first, then conduct statistics for each attributes (Tier, Month end date, Num payments, Amount of payments, New employers, Open employers at EOM) via Python.