Fact Table: **FeedbackFact**

Granularity: Transaction

Grain Definition: Each row consists of one instance of feedback for one student/class given by one teacher based on one observed skill/behavior

Associated Dimensions: The suitable dimensions are DATE, STUDENT, SKILL, TEACHER, SCHOOL, and CLASS.

Fact Table: **AttendanceFact**

Granularity: Transaction

Grain Definition: Each row consists of one attendance status taken for one student in a given class at a given time

Associated Dimensions: The suitable dimensions are DATE, STUDENT, SCHOOL, and CLASS.

--- ISQA8410 Project Part 3, SQL queries

--- Eric Troudt

--- 1. List the number of feedbacks broken down by class and student for the school year 2020-2021 for one

---   school. The output should list {classroom, student, number of feedback}.


```
SELECT cd_cl.class_name classroom, cd_st.student_key student, COUNT(cd_fd.feedback_id) "number of feedback"
FROM ClassDojo_FeedbackFact cd_fd
        JOIN ClassDojo_ClassDim cd_cl ON cd_fd.class_key = cd_cl.class_key
        JOIN ClassDojo_StudentDim cd_st ON cd_fd.student_key = cd_st.student_key
        JOIN ClassDojo_DateDim cd_dt ON (cd_fd.date_key = cd_dt.date_key AND cd_dt.date_academic_year = '2020-2021')
        JOIN ClassDojo_SchoolDim cd_sch ON (cd.fd.school_key = cd_sch.school_key AND cd_sch.school_name = '**a given school name**')
GROUP BY cd_cl.class_name, cd_st.student_key;
```

--- 2. List the number of positive and negative feedback broken down by teacher of one school in school year

---   2020-2021. The output should list {teacher, number of positive feedback, number of negative feedback}.

SELECT cd_t.teacher_id, COUNT(CASE WHEN cd_sk.negpos = 'pos' THEN 1 END) "# of positive feedback",

                      COUNT(CASE WHEN cd_sk.negpos = 'neg' THEN 1 END) "# of negative feedback"

 FROM ClassDojo_FeedbackFact cd_fd

        JOIN ClassDojo_TeacherDim cd_t ON cd_fd.teacher_key = cd_t.teacher_key

        JOIN ClassDojo_SkillDim cd_sk ON cd.fd.skill_id = cd_sk.skill_id

        JOIN ClassDojo_DateDim cd_dt ON (cd_fd.date_key = cd_dt.date_key AND cd_dt.date_academic_year = '2020-2021')

        JOIN ClassDojo_SchoolDim cd_sch ON (cd.fd.school_key = cd_sch.school_key AND cd_sch.school_name = '**a given school name**')

 GROUP BY cd_t.teacher_id;

--- 3. List the feedback points for one student for all the months in 2020. The output should list {month, class,

---   feedback points}

SELECT cd_dt.date_month "month", cd_cl.class_name "class", SUM(cd_fd.feedback_points) "Feedback Total Points"

FROM ClassDojo_FeedbackFact cd_fd

        JOIN ClassDojo_DateDim cd_dt ON cd_fd.date_key = cd_dt.date_key

        JOIN ClassDojo_ClassDim cd_cl ON cd_fd.class_key = cd_cl.class_key

        JOIN ClassDojo_StudentDim cd_st ON (cd_fd.student_key = cd_st.student_key AND cd.st.student_key = "** given student key**")

GROUP BY cd_dt.date_month, cd_cl.class_name;

--- 4. List the number of feedbacks broken down by skill for one class for each academic quarter in academic

---   year 2020-2021. The output should list {skill, quarter, number of feedbacks}

SELECT cd_sk.skill_name "skill name", cd_dt.date_academic_year_quarter "academic quarter (2020-2021)",
COUNT(cd_fd.feedback_id)

FROM ClassDojo_FeedbackFact cd_fd

     JOIN ClassDojo_SkillDim cd_sk ON cd.fd.skill_id = cd_sk.skill_id

     JOIN ClassDojo_DateDim cd_dt ON (cd_fd.date_key = cd_dt.date_key AND cd_dt.date_academic_year = '2020-2021')

     JOIN ClassDojo_ClassDim cd_cl ON cd_fd.class_key = cd_cl.class_key AND cd_cl.class_name = '**a given class**'

 GROUP BY cd_sk.skill_name, cd_dt.date_academic_year_quarter;

--- 5. List the monthly attendance status for students in a class for school year 2020-2021. The output should list

---   {student, month, status, number of attendance}

SELECT cd_st.student_key student, cd_dt.date_month "month", cd_at.attendance_status, COUNT(attendance_status) "# of
attendance"

FROM ClassDojo_AttendanceFact cd_at

     JOIN ClassDojo_StudentDim cd_st ON cd_at.student_key = cd_st.student_key

     JOIN ClassDojo_DateDim cd_dt ON (cd_at.date_key = cd_dt.date_key AND cd_dt.date_academic_year = '2020-2021')

     JOIN ClassDojo_ClassDim cd_cl ON cd_at.class_key = cd_cl.class_key AND cd_cl.class_name = '**a given class**'

GROUP BY cd_st.student_key, cd_dt.date_month, cd_at.attendance_status;

--- 6. List the attendance status for students per school districts for schools in year 2020-2021. The output

---   should list {district, status, number of attendance}

SELECT cd_sch.school_district_name, cd_at.attendance_status, COUNT(attendance_status) "# of attendance"

FROM ClassDojo_AttendanceFact cd_at

      JOIN ClassDojo_SchoolDim cd_sch ON cd.at.school_key = cd_sch.school_key

      JOIN ClassDojo_DateDim cd_dt ON (cd_at.date_key = cd_dt.date_key AND cd_dt.date_academic_year = '2020-2021')

      JOIN ClassDojo_ClassDim cd_cl ON cd_at.class_key = cd_cl.class_key

GROUP BY cd_sch.school_district_name, cd_at.attendance_status;