1.output:

```sql
SELECT *
FROM students
WHERE student_id IN (
    SELECT student_id
    FROM Enrollments
    WHERE course_id = (
        SELECT course_id
        FROM courses  .
        WHERE course_name = 'Math'
    )
);
```

Data Output | Messages | Notifications

	student_id [PK] integer	student_name character varying (50)	student_age integer	student_grade_id integer
1	1	Alice	17	1
2	3	Charlie	18	1
3	4	David	16	2
4	6	Frank	18	3

2.output:

```sql
SELECT course_id, course_name
FROM Courses
WHERE course_id IN (
    SELECT course_id
    FROM Enrollments
    WHERE student_id = (
        SELECT student_id
        FROM students
        WHERE student_name = 'Bob'
    )
);
```

Data Output | Messages | Notifications

	course_id [PK] integer	course_name character varying (50)
1	102	Science

3.output:

```sql
SELECT student_name
FROM students
WHERE student_id IN (
    SELECT student_id
    FROM Enrollments
    GROUP BY student_id
    HAVING COUNT(course_id) > 1
);
```

Data Output | Messages | Notifications

	student_name character varying (50)
1	Alice
2	Charlie
3	David

4.output

```sql
SELECT student_name
FROM students
WHERE student_grade_id = 1;
```

Data Output | Messages | Notifications

	student_name character varying (50)
1	Alice
2	Charlie
3	Eve
4	Henry

5.output:

```sql
SELECT course_id, (
    SELECT course_name
    FROM Courses
    WHERE Courses.course_id = Enrollments.course_id
) AS course_name,
COUNT(student_id)
FROM Enrollments
GROUP BY course_id;
```

Data Output | Messages | Notifications

	course_id integer	course_name character varying (50)	count bigint
1	101	Math	4
2	103	History	2
3	102	Science	4

6.output:

Query | Query History

```sql
SELECT course_id, (
    SELECT course_name
    FROM Courses
    WHERE Courses.course_id = Enrollments.course_id
) AS course_name,
COUNT(student_id)
FROM Enrollments
GROUP BY course_id
ORDER BY COUNT DESC
LIMIT 1;
```

Data Output | Messages | Notifications

	course_id integer	course_name character varying (50)	count bigint
1	101	Math	4

7.output:

Query Query History

```
1  SELECT student_id, student_name
2  FROM students
3  WHERE student_id IN (
4      SELECT student_id
5      FROM enrollments
6      GROUP BY student_id
7      HAVING COUNT(DISTINCT course_id) = (
8          SELECT COUNT(DISTINCT course_id)
9          FROM enrollments
10     )
11 );
```

Data Output Messages Notifications

	student_id [PK] integer	student_name character varying (50)

8.output:

Query | Query History

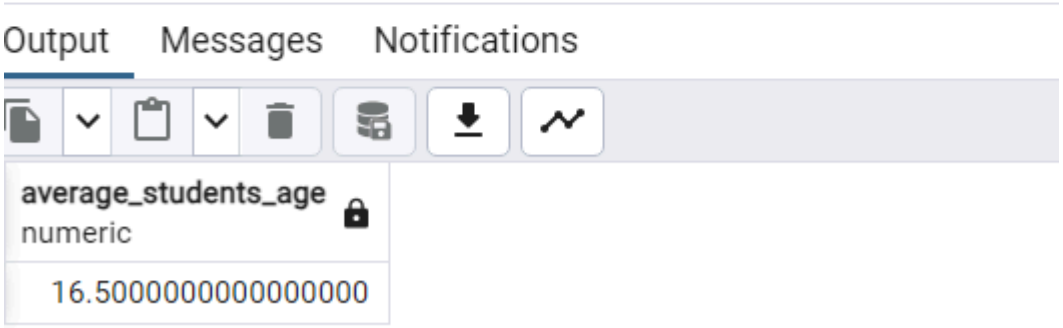
```
1  SELECT student_id, student_name
2  FROM students
3  WHERE student_id NOT IN (
4      SELECT DISTINCT student_id
5      FROM enrollments
6  );
7
```

Data Output | Messages | Notifications

	student_id [PK] integer	student_name character varying (50)
1	8	Henry
2	9	Ivy
3	10	Jack

9.output:

```sql
SELECT AVG(student_age) AS average_students_age
FROM students
WHERE student_id IN (
    SELECT student_id
    FROM Enrollments
    WHERE course_id = (
        SELECT course_id
        FROM Courses
        WHERE course_name = 'Science'
    )
);
```



10. Output:

```sql
SELECT student_name, student_grade_id
FROM students
WHERE student_id IN (
    SELECT student_id
    FROM enrollments
    WHERE course_id IN (
        SELECT course_id
        FROM courses
        WHERE course_name = 'History'
    )
);
```

Output Messages Notifications

student_name character varying (50)	student_grade_id integer
Grace	2
Charlie	1