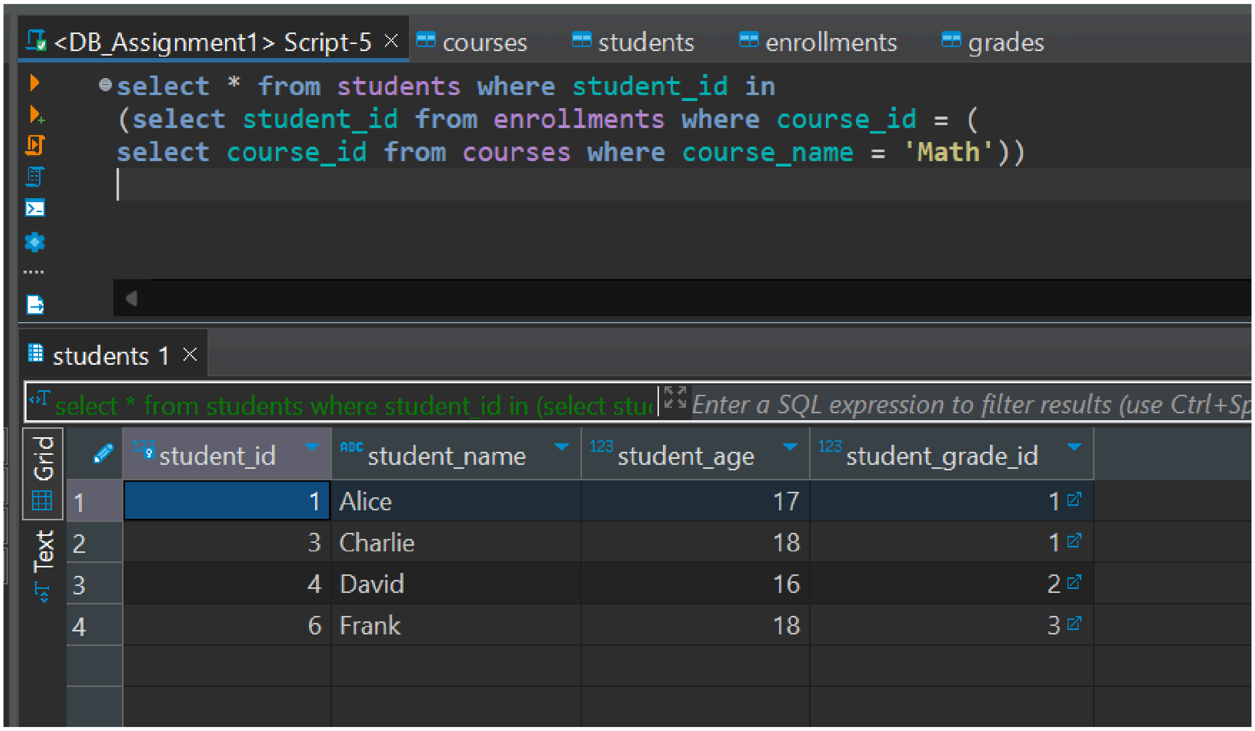
Q1.

```
select * from students where student_id in
(select student_id from enrollments where course_id =
( select course_id from courses where course_name = 'Math'))
```

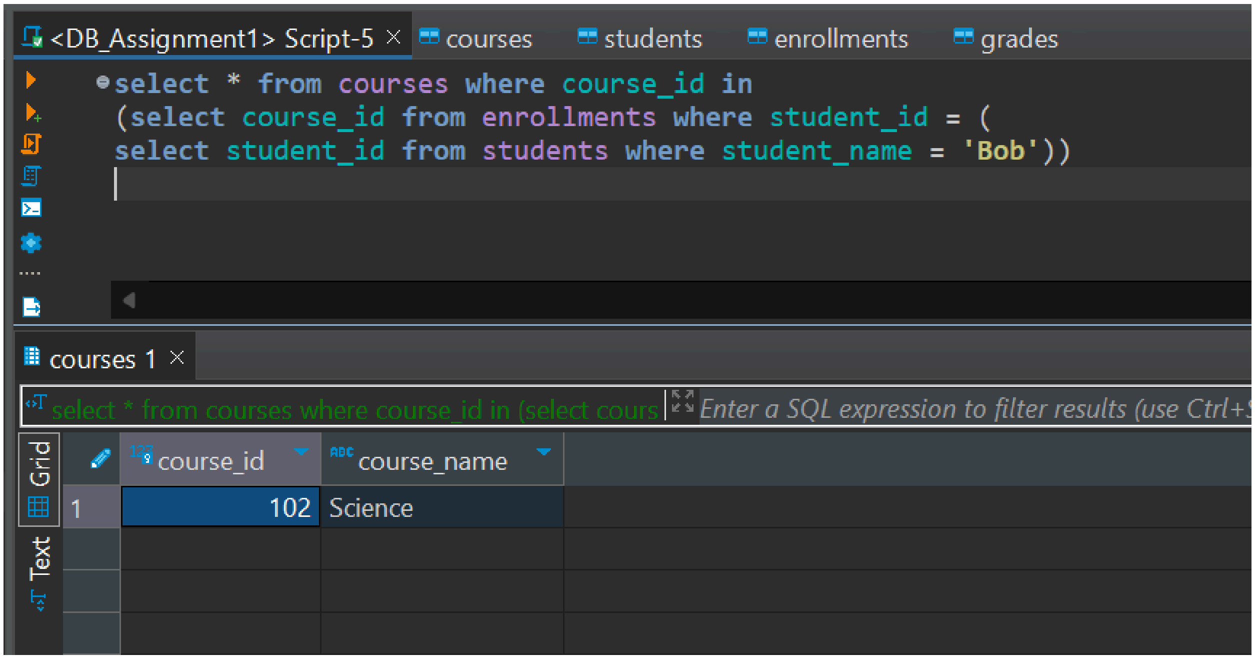

<DB_Assignment1> Script-5
courses
students
enrollments
grades
students 1
select * from students where student_id in (select stu
Enter a SQL expression to filter results (use Ctrl+Sp
Grid
Text

```
select * from students where student_id in
(select student_id from enrollments where course_id = (
select course_id from courses where course_name = 'Math'))
```

	student_id	student_name	student_age	student_grade_id
1	1	Alice	17	1
2	3	Charlie	18	1
3	4	David	16	2
4	6	Frank	18	3

Q2.

```
select * from courses where course_id in
(select course_id from enrollments where student_id = (
select student_id from students where student_name = 'Bob'));
```


<DB_Assignment1> Script-5
courses
students
enrollments
grades
courses 1
Enter a SQL expression to filter results (use Ctrl+S
Grid
Text

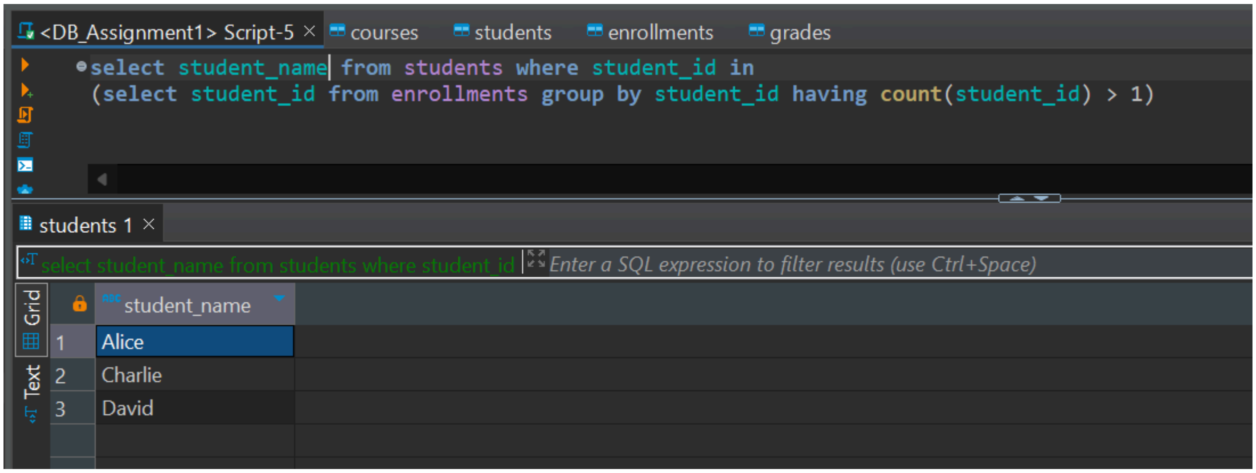
```
select * from courses where course_id in
(select course_id from enrollments where student_id = (
select student_id from students where student_name = 'Bob'))
```

select * from courses where course_id in (select cours

	course_id	course_name
1	102	Science

Q3.

```
select student_name from students where student_id in
(select student_id from enrollments group by student_id having count(student_id) > 1);
```


<DB_Assignment1> Script-5
courses
students
enrollments
grades
students 1
Enter a SQL expression to filter results (use Ctrl+Space)
Grid
Text

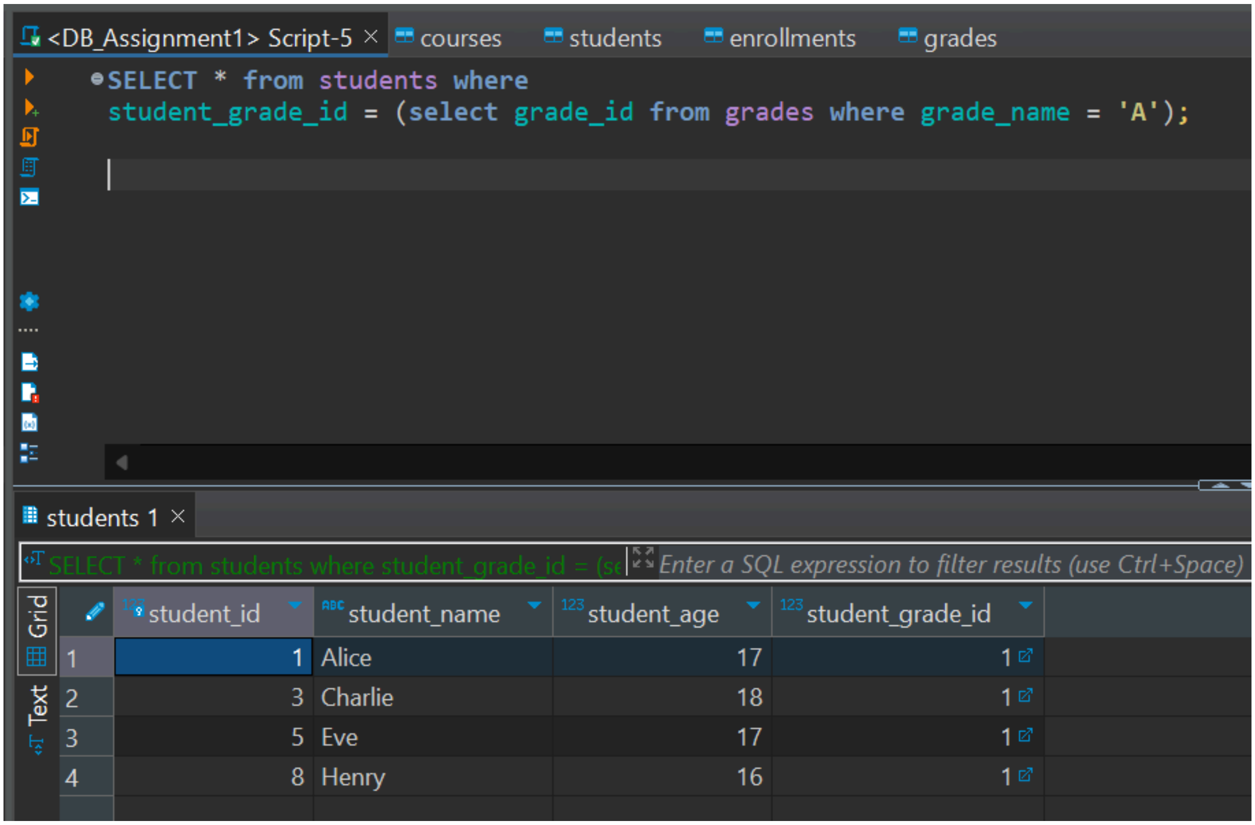
```
select student_name from students where student_id in
(select student_id from enrollments group by student_id having count(student_id) > 1)
```

select student_name from students where student_id

	student_name
1	Alice
2	Charlie
3	David

Q4.

```
SELECT * from students where
student_grade_id = (select grade_id from grades where grade_name = 'A');
```



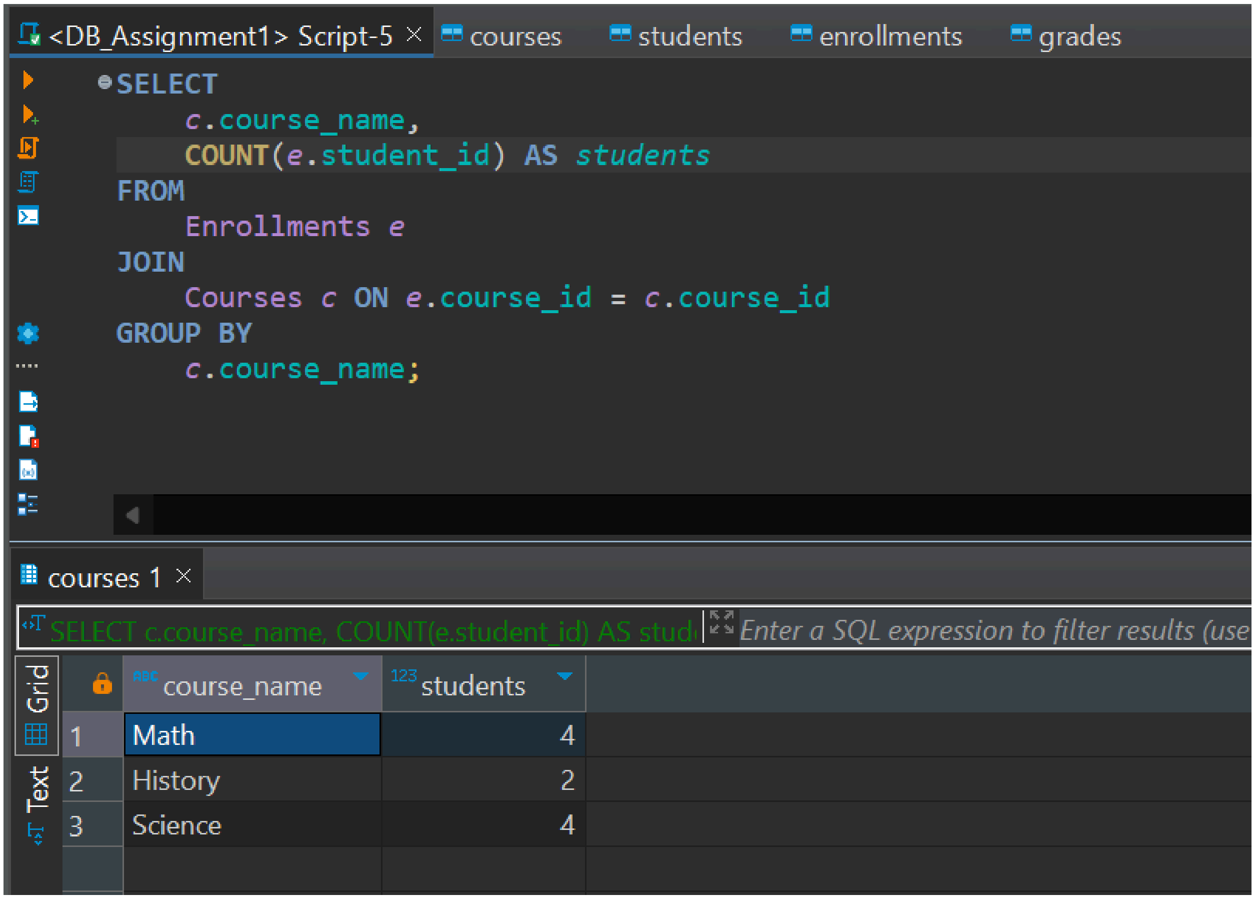
<DB_Assignment1> Script-5
courses
students
enrollments
grades
students 1
Grid
Text
Enter a SQL expression to filter results (use Ctrl+Space)

```
SELECT * from students where
student_grade_id = (select grade_id from grades where grade_name = 'A');
```

	student_id	student_name	student_age	student_grade_id
1	1	Alice	17	1
2	3	Charlie	18	1
3	5	Eve	17	1
4	8	Henry	16	1

Q5.

```
SELECT
  c.course_name,
  COUNT(e.student_id) AS students
FROM
  Enrollments e
JOIN
  Courses c ON e.course_id = c.course_id
GROUP BY
  c.course_name;
```



<DB_Assignment1> Script-5
courses
students
enrollments
grades
courses 1
Enter a SQL expression to filter results (use
Grid
Text

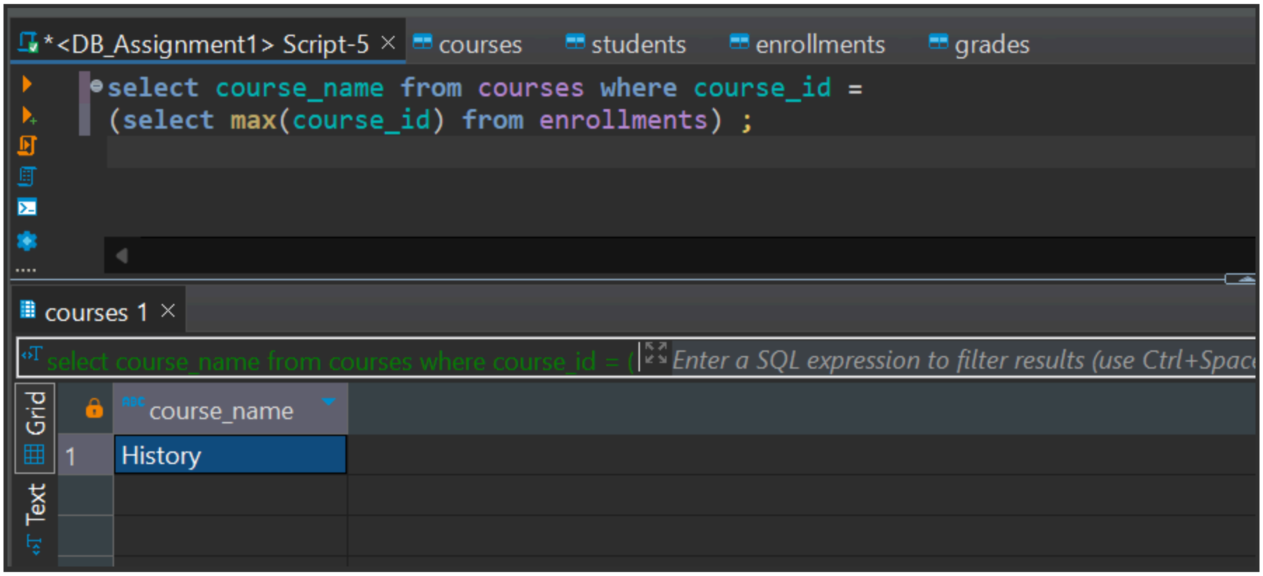
```
SELECT
    c.course_name,
    COUNT(e.student_id) AS students
FROM
    Enrollments e
JOIN
    Courses c ON e.course_id = c.course_id
GROUP BY
    c.course_name;
```

SELECT c.course_name, COUNT(e.student_id) AS stud

	course_name	students
1	Math	4
2	History	2
3	Science	4

Q6.

```sql
select course_name from courses where course_id = (select max(course_id) from enrollments) ;
```

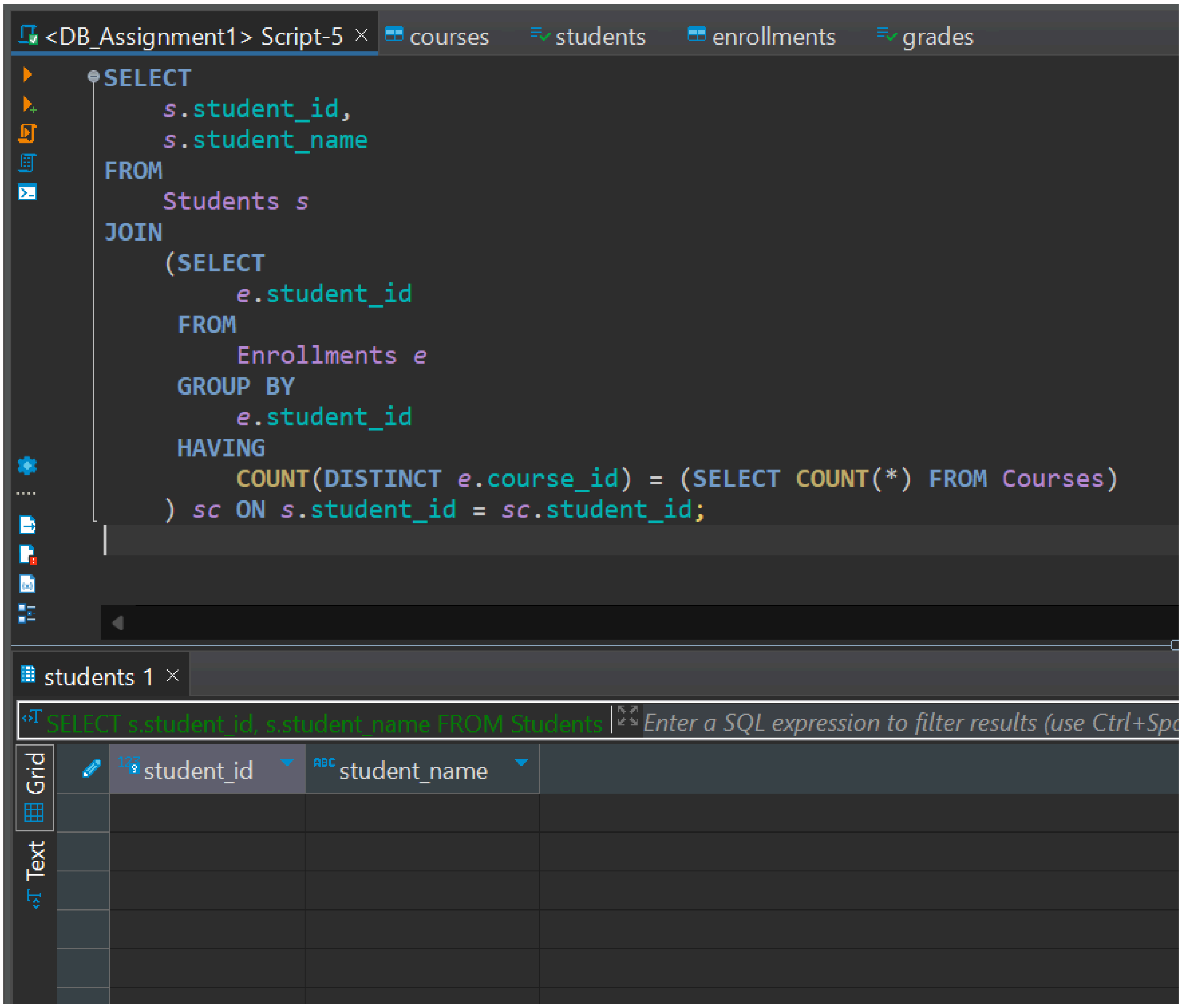

*<DB_Assignment1> Script-5
courses
students
enrollments
grades
courses 1
select course_name from courses where course_id = (
Enter a SQL expression to filter results (use Ctrl+Spac
Grid
Text

```sql
select course_name from courses where course_id =
(select max(course_id) from enrollments) ;
```

	course_name
1	History

Q7.

```sql
SELECT
  s.student_id,
  s.student_name
FROM
  Students s
JOIN
  (SELECT
     e.student_id
   FROM
     Enrollments e
   GROUP BY
     e.student_id
   HAVING
     COUNT(DISTINCT e.course_id) = (SELECT COUNT(*) FROM Courses)
  ) sc ON s.student_id = sc.student_id;
```



```sql
SELECT
    s.student_id,
    s.student_name
FROM
    Students s
JOIN
    (SELECT
         e.student_id
     FROM
         Enrollments e
     GROUP BY
         e.student_id
     HAVING
         COUNT(DISTINCT e.course_id) = (SELECT COUNT(*) FROM Courses)
    ) sc ON s.student_id = sc.student_id;
```

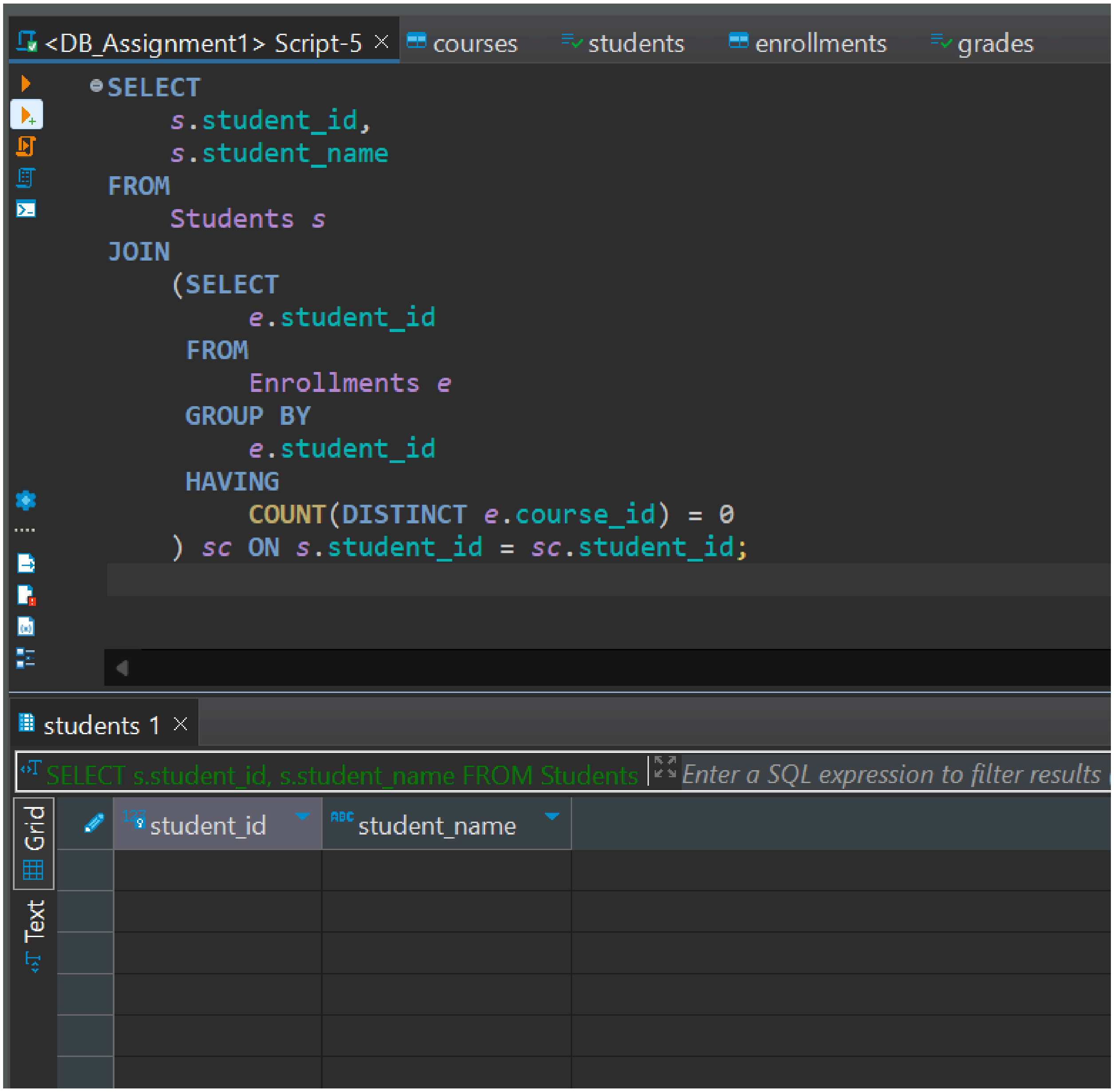
SELECT s.student_id, s.student_name FROM Students

Enter a SQL expression to filter results (use Ctrl+Spa

student_id	student_name

Q8.

```
SELECT
  s.student_id,
  s.student_name
FROM
  Students s
JOIN
  (SELECT
      e.student_id
   FROM
      Enrollments e
   GROUP BY
      e.student_id
   HAVING
      COUNT(DISTINCT e.course_id) = 0
  ) sc ON s.student_id = sc.student_id;
```


<DB_Assignment1> Script-5
courses
students
enrollments
grades
students 1
Grid
Text
Enter a SQL expression to filter results

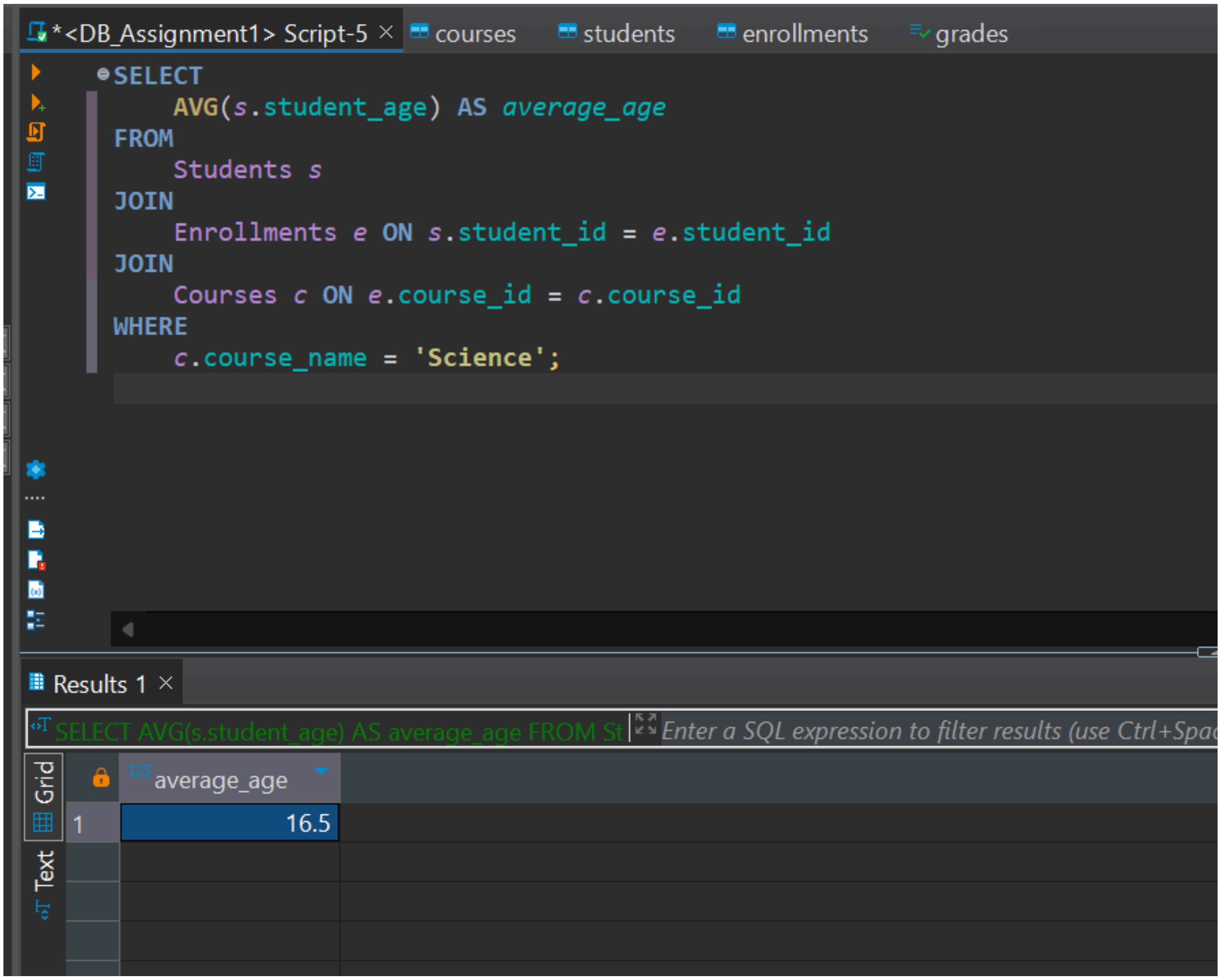
```sql
SELECT
    s.student_id,
    s.student_name
FROM
    Students s
JOIN
    (SELECT
        e.student_id
     FROM
        Enrollments e
     GROUP BY
        e.student_id
     HAVING
        COUNT(DISTINCT e.course_id) = 0
    ) sc ON s.student_id = sc.student_id;
```

SELECT s.student_id, s.student_name FROM Students

student_id	student_name

Q9.

```
SELECT
  AVG(s.student_age) AS average_age
FROM
  Students s
JOIN
  Enrollments e ON s.student_id = e.student_id
JOIN
  Courses c ON e.course_id = c.course_id
WHERE
  c.course_name = 'Science';
```



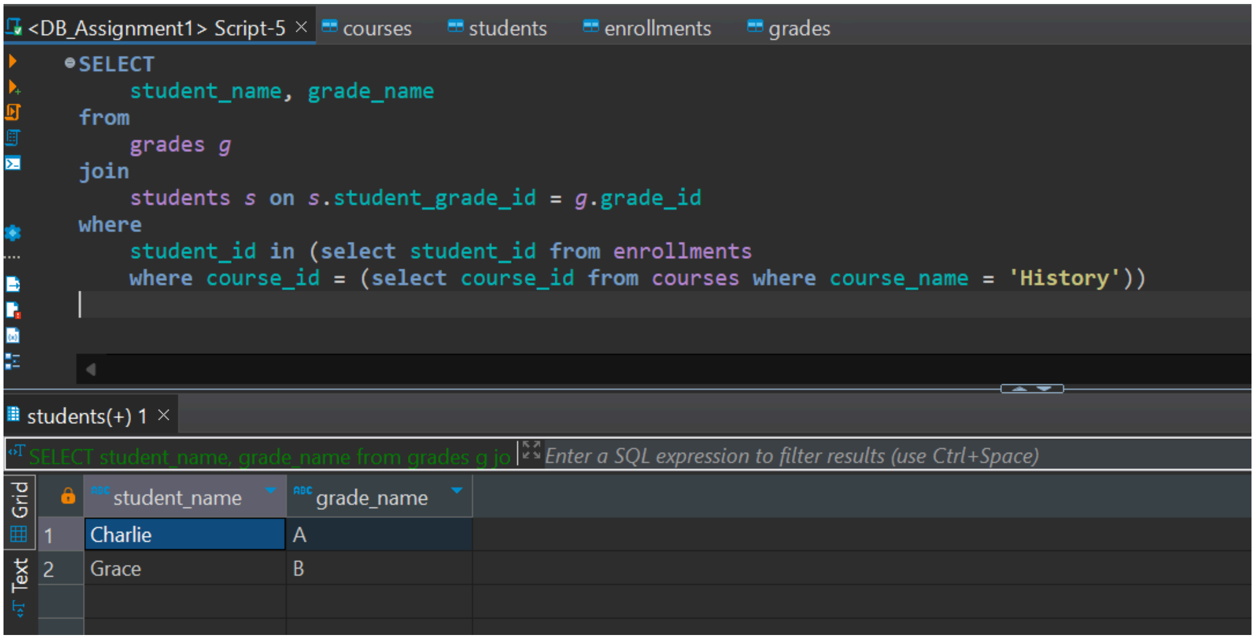
*<DB_Assignment1> Script-5
courses
students
enrollments
grades
Results 1
SELECT AVG(s.student_age) AS average_age FROM St
Enter a SQL expression to filter results (use Ctrl+Spac
Grid
Text

```
SELECT
    AVG(s.student_age) AS average_age
FROM
    Students s
JOIN
    Enrollments e ON s.student_id = e.student_id
JOIN
    Courses c ON e.course_id = c.course_id
WHERE
    c.course_name = 'Science';
```

```
   average_age
1         16.5
```

Q10.

```
SELECT
	student_name, grade_name
from
	grades g
join
	students s on s.student_grade_id = g.grade_id
where
	student_id in (select student_id from enrollments
	where course_id = (select course_id from courses where course_name = 'History'))
```



```
SELECT
    student_name, grade_name
from
    grades g
join
    students s on s.student_grade_id = g.grade_id
where
    student_id in (select student_id from enrollments
    where course_id = (select course_id from courses where course_name = 'History'))
```

SELECT student_name, grade_name from grades g jo | *Enter a SQL expression to filter results (use Ctrl+Space)*

	student_name	grade_name
1	Charlie	A
2	Grace	B

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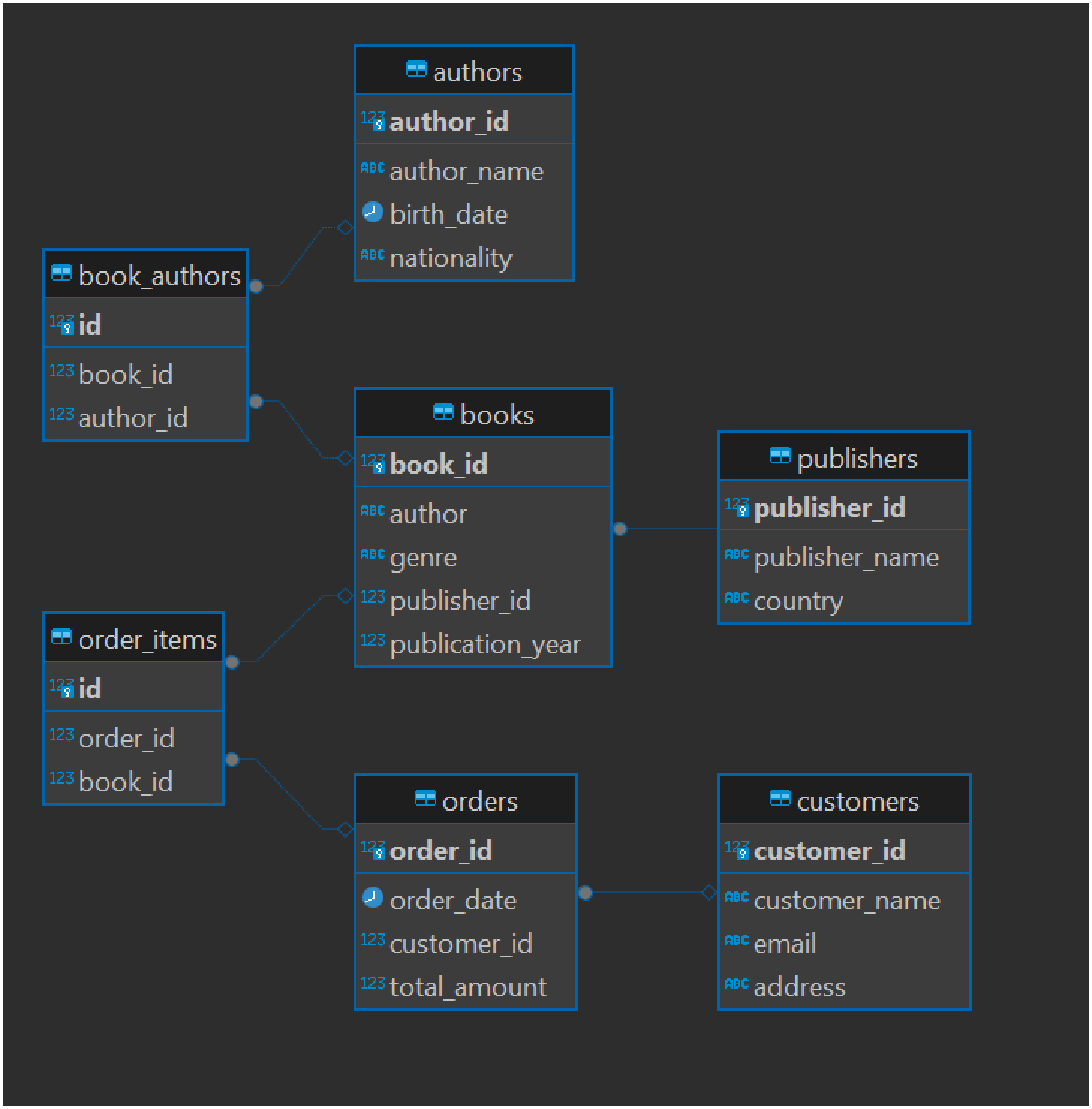
authors
author_id
author_name
birth_date
nationality
book_authors
id
book_id
author_id
books
book_id
author
genre
publisher_id
publication_year
publishers
publisher_id
publisher_name
country
order_items
id
order_id
book_id
orders
order_id
order_date
customer_id
total_amount
customers
customer_id
customer_name
email
address