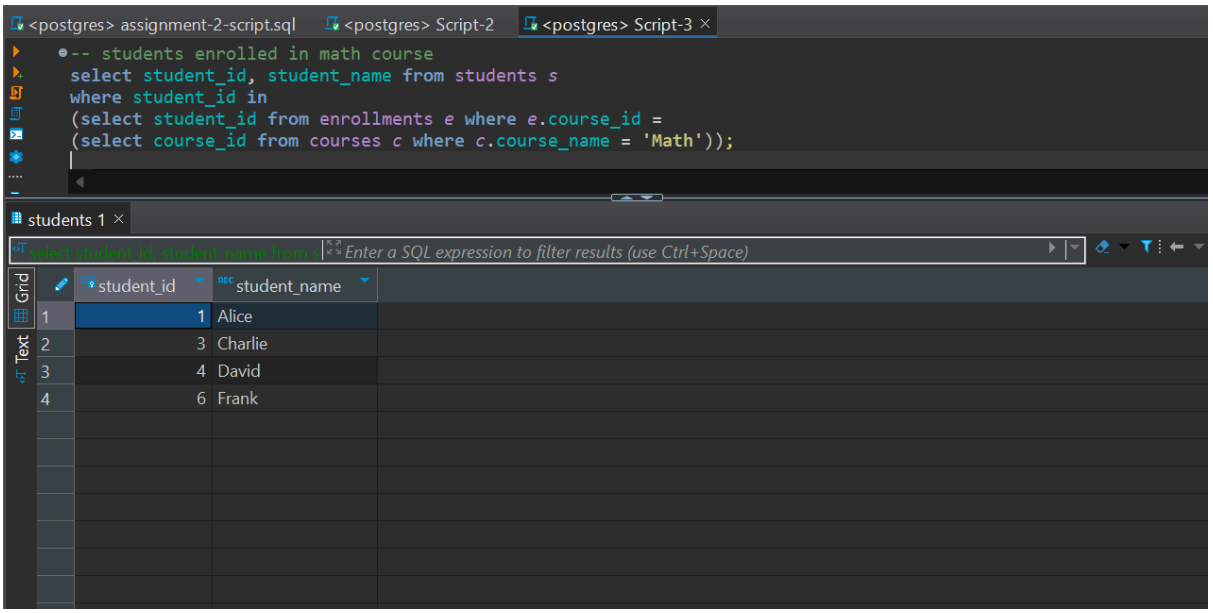
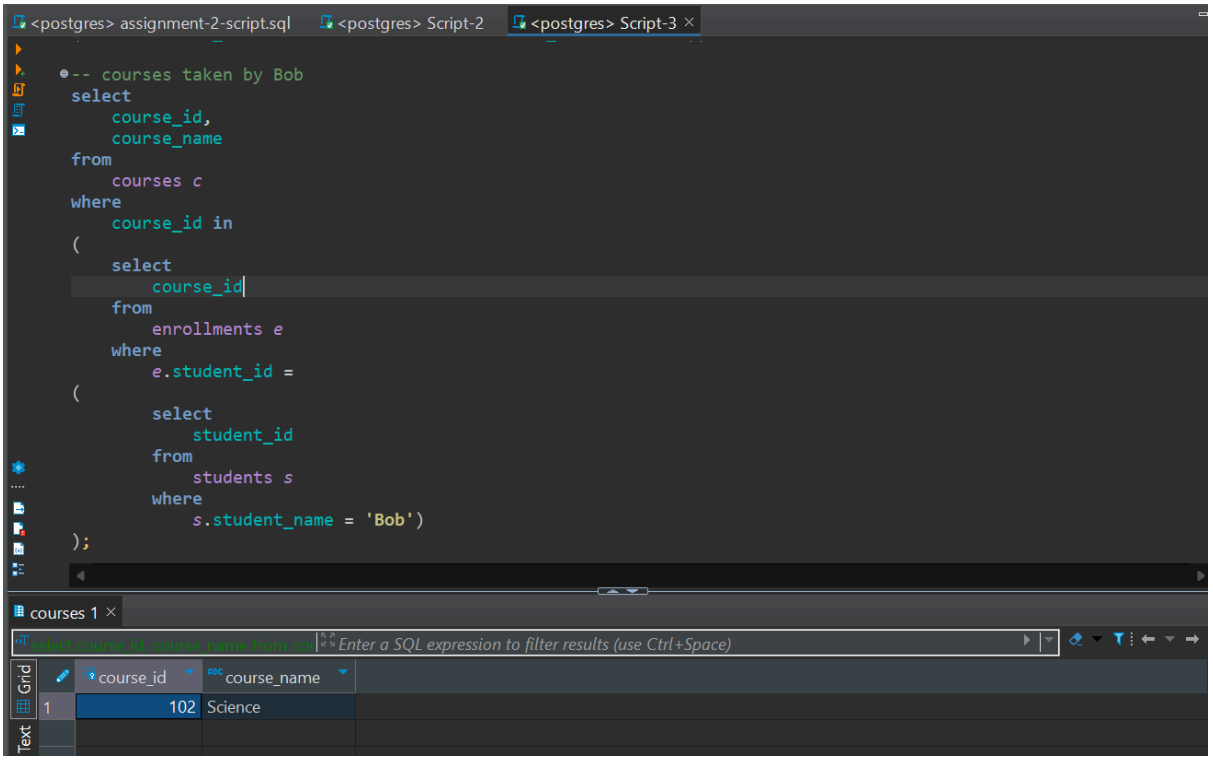
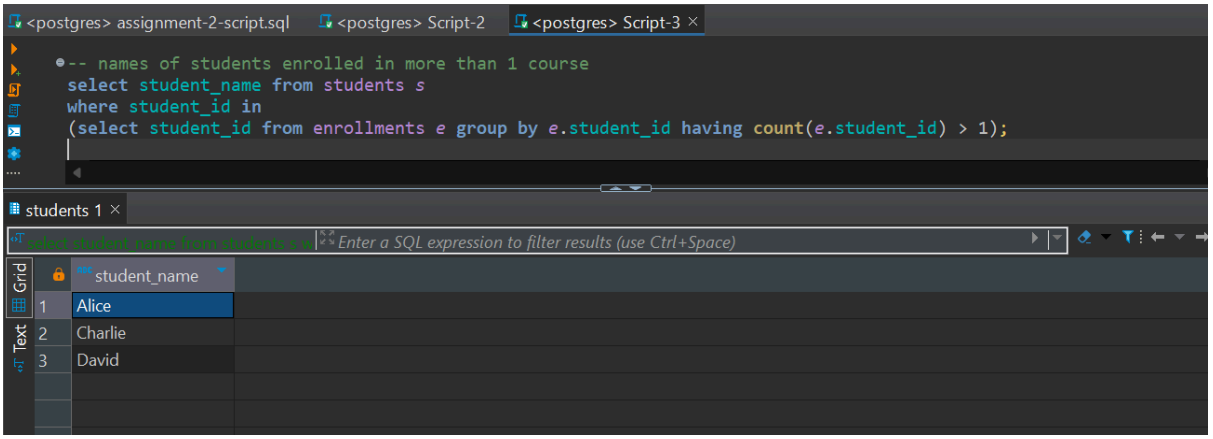
Q1.


<postgres> assignment-2-script.sql
<postgres> Script-2
<postgres> Script-3
-- students enrolled in math course
select student_id, student_name from students s
where student_id in
(select student_id from enrollments e where e.course_id =
(select course_id from courses c where c.course_name = 'Math'));
students 1
Enter a SQL expression to filter results (use Ctrl+Space)
Grid
Text
student_id
student_name
1 1 Alice
2 3 Charlie
3 4 David
4 6 Frank

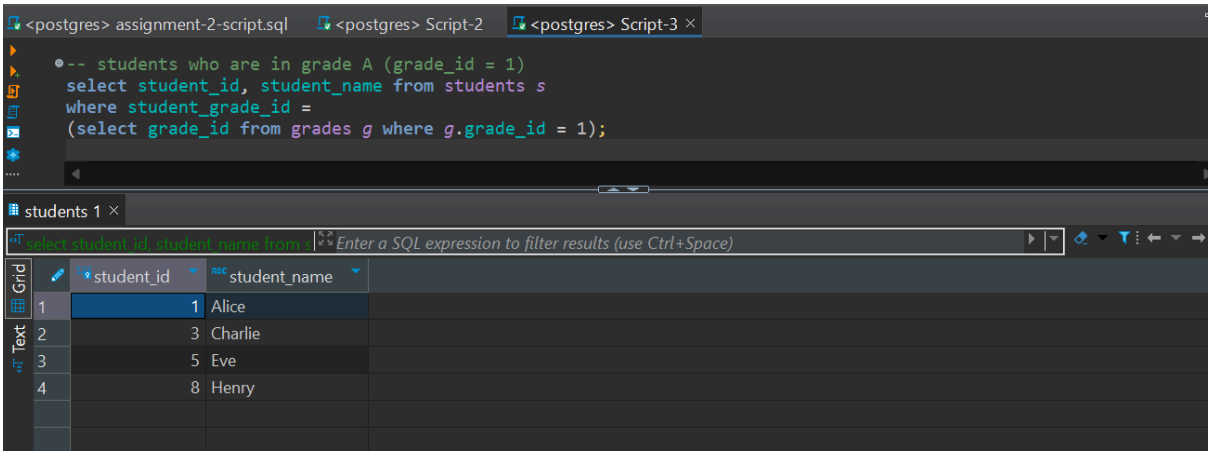
Q2.


<postgres> assignment-2-script.sql
<postgres> Script-2
<postgres> Script-3
-- courses taken by Bob
select
course_id,
course_name
from
courses c
where
course_id in
(
select
course_id
from
enrollments e
where
e.student_id =
(
select
student_id
from
students s
where
s.student_name = 'Bob')
);
courses 1
Enter a SQL expression to filter results (use Ctrl+Space)
Grid
Text
course_id
course_name
1 102 Science

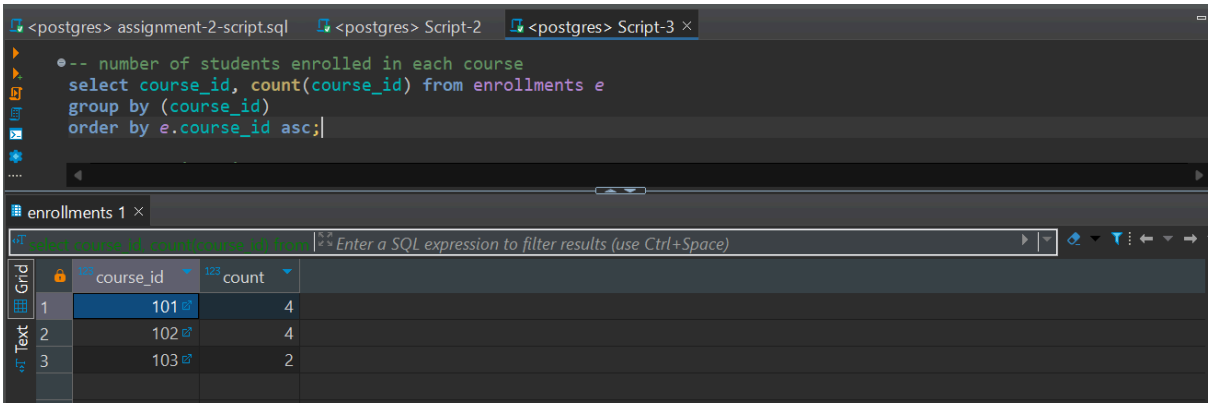
Q3.


-- names of students enrolled in more than 1 course
select student_name from students s
where student_id in
(select student_id from enrollments e group by e.student_id having count(e.student_id) > 1);
students 1
Enter a SQL expression to filter results (use Ctrl+Space)
student_name
1 Alice
2 Charlie
3 David

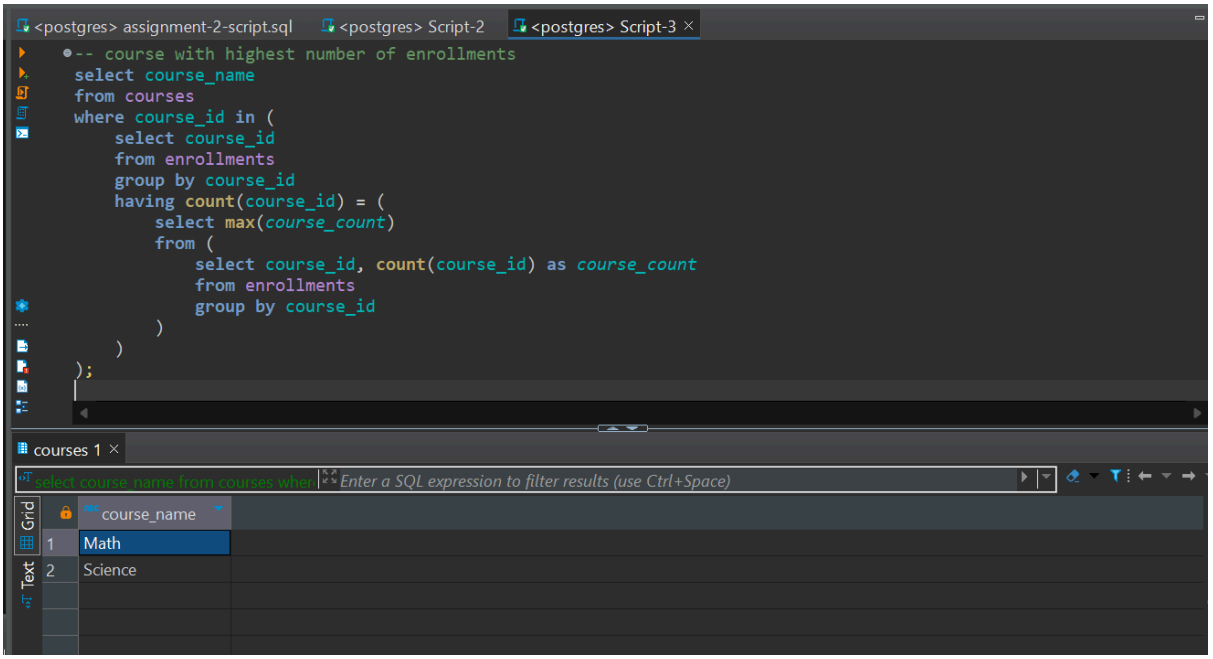
Q4.


-- students who are in grade A (grade_id = 1)
select student_id, student_name from students s
where student_grade_id =
(select grade_id from grades g where g.grade_id = 1);
students 1
Enter a SQL expression to filter results (use Ctrl+Space)
student_id student_name
1 1 Alice
2 3 Charlie
3 5 Eve
4 8 Henry

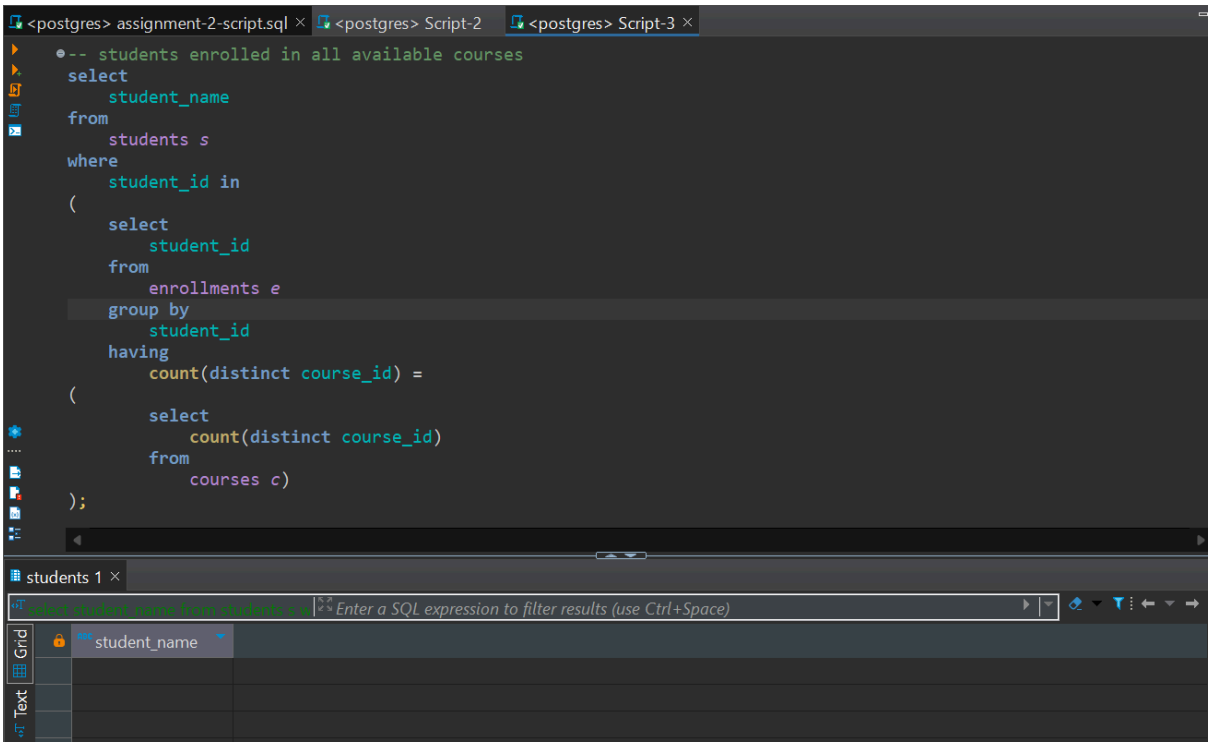
Q5.


-- number of students enrolled in each course
select course_id, count(course_id) from enrollments e
group by (course_id)
order by e.course_id asc;
enrollments 1
Enter a SQL expression to filter results (use Ctrl+Space)
course_id count
1 101 4
2 102 4
3 103 2

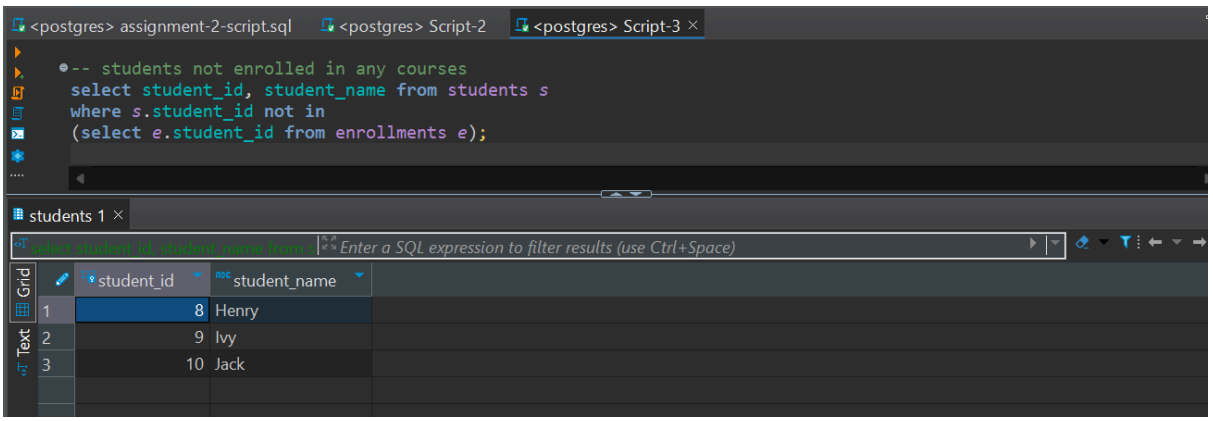
Q6.


-- course with highest number of enrollments
select course_name
from courses
where course_id in (
select course_id
from enrollments
group by course_id
having count(course_id) = (
select max(course_count)
from (
select course_id, count(course_id) as course_count
from enrollments
group by course_id
)
)
);
courses 1
Enter a SQL expression to filter results (use Ctrl+Space)
course_name
1 Math
2 Science

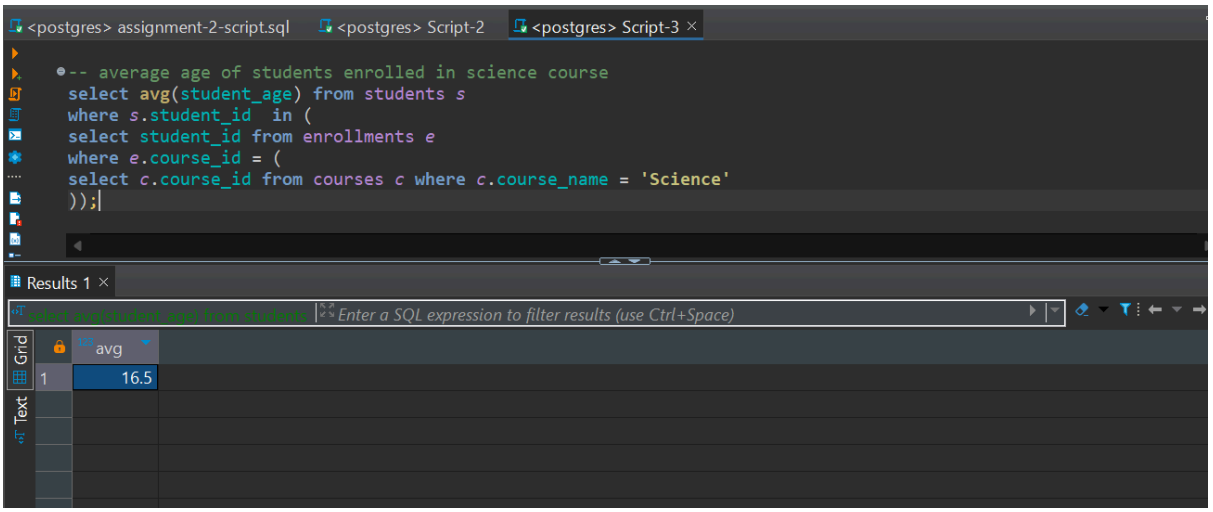
Q7.


-- students enrolled in all available courses
select
student_name
from
students s
where
student_id in
(
select
student_id
from
enrollments e
group by
student_id
having
count(distinct course_id) =
(
select
count(distinct course_id)
from
courses c)
);
students 1
Enter a SQL expression to filter results (use Ctrl+Space)
student_name

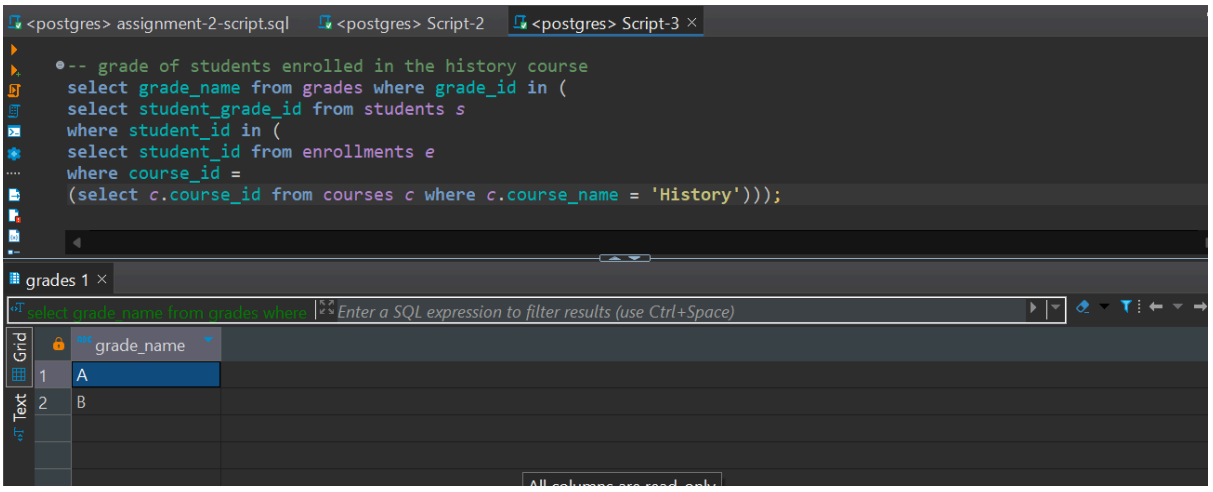
Q8.


<postgres> assignment-2-script.sql
<postgres> Script-2
<postgres> Script-3
-- students not enrolled in any courses
select student_id, student_name from students s
where s.student_id not in
(select e.student_id from enrollments e);
students 1
Enter a SQL expression to filter results (use Ctrl+Space)
Grid
Text
student_id
student_name
1 8 Henry
2 9 Ivy
3 10 Jack

Q9.


<postgres> assignment-2-script.sql
<postgres> Script-2
<postgres> Script-3
-- average age of students enrolled in science course
select avg(student_age) from students s
where s.student_id in (
select student_id from enrollments e
where e.course_id = (
select c.course_id from courses c where c.course_name = 'Science'
));
Results 1
Enter a SQL expression to filter results (use Ctrl+Space)
Grid
Text
avg
1 16.5

Q10.


<postgres> assignment-2-script.sql
<postgres> Script-2
<postgres> Script-3
-- grade of students enrolled in the history course
select grade_name from grades where grade_id in (
select student_grade_id from students s
where student_id in (
select student_id from enrollments e
where course_id =
(select c.course_id from courses c where c.course_name = 'History')));
grades 1
Enter a SQL expression to filter results (use Ctrl+Space)
Grid
Text
grade_name
1 A
2 B