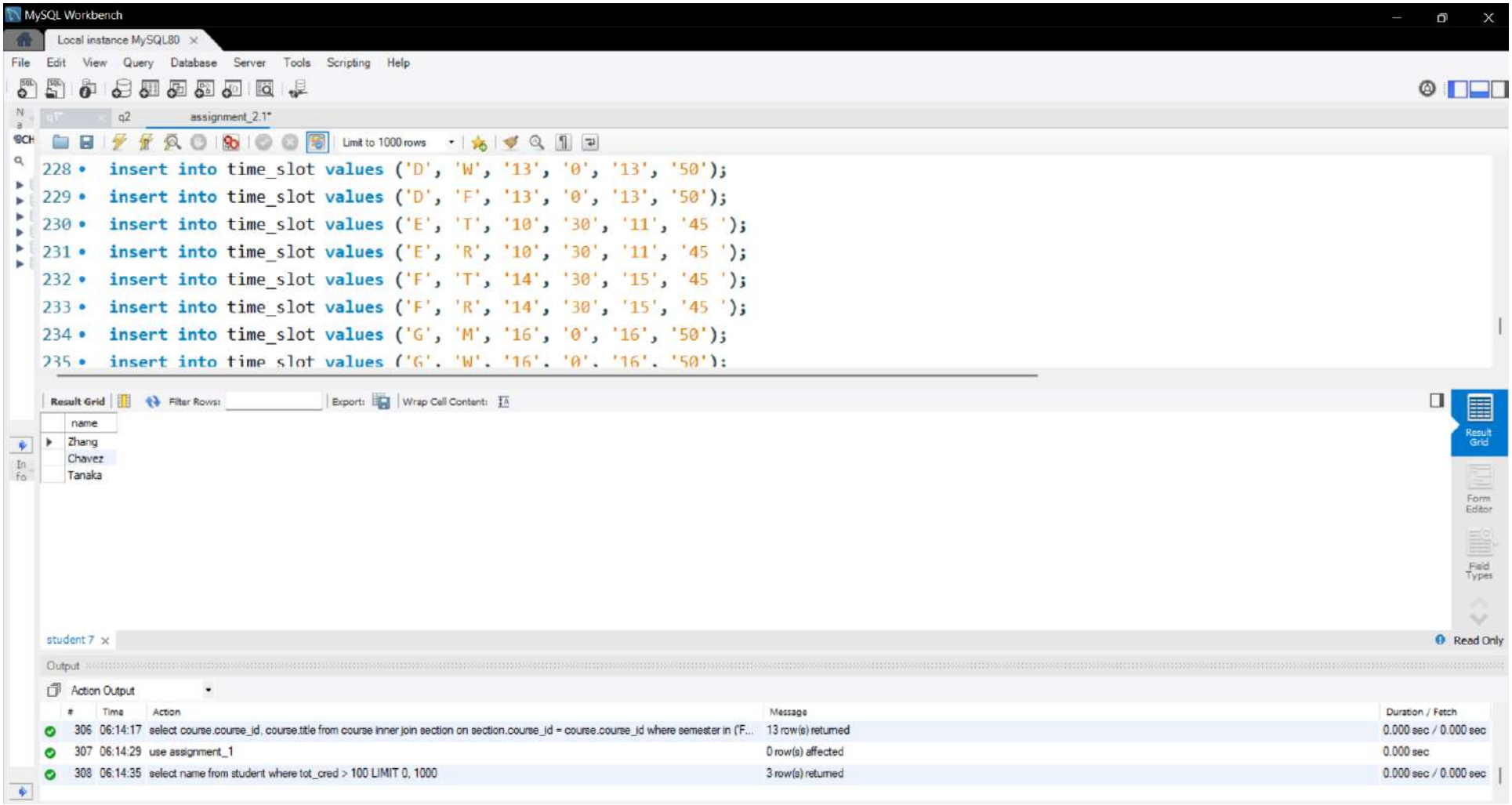
Part 1 .Write following simple SQL Queries on the University Schema.

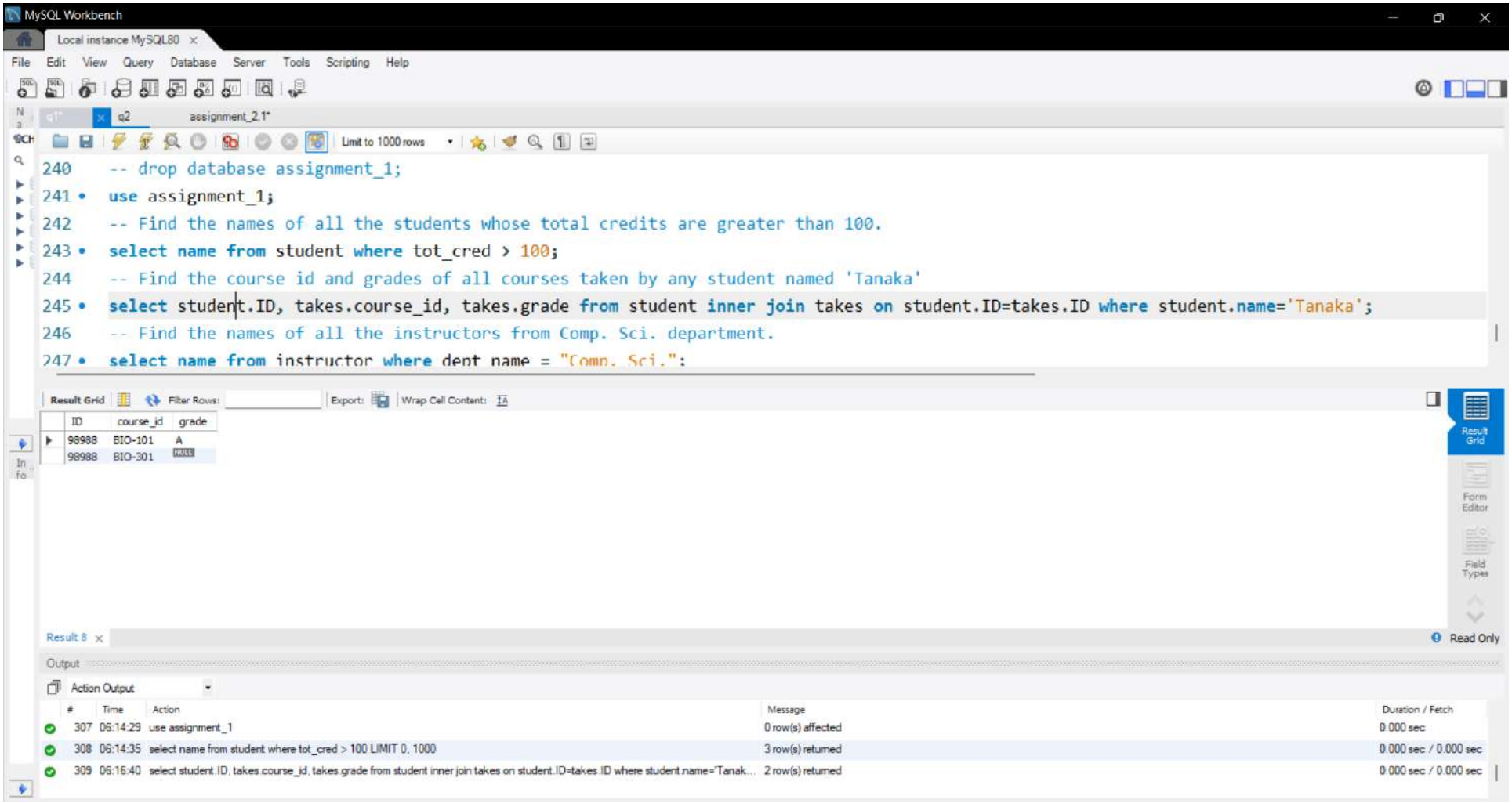
A.Find the names of all the students whose total credits are greater than 100.

select name from student where tot_cred > 100;



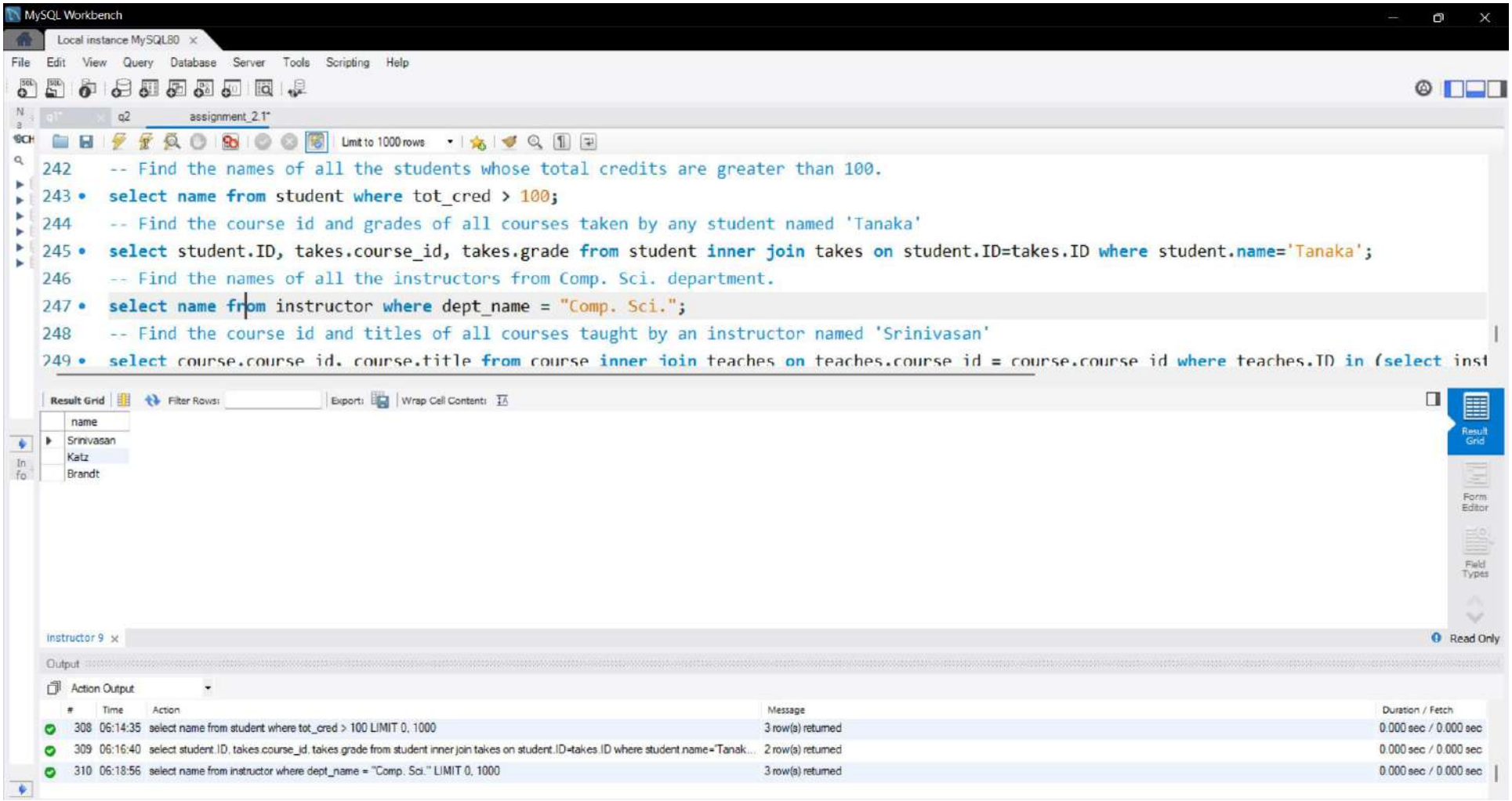
B.Find the course id and grades of all courses taken by any student named 'Tanaka'

select student.ID, takes.course_id, takes.grade from student inner join takes on student.ID=takes.ID where student.name='Tanaka';



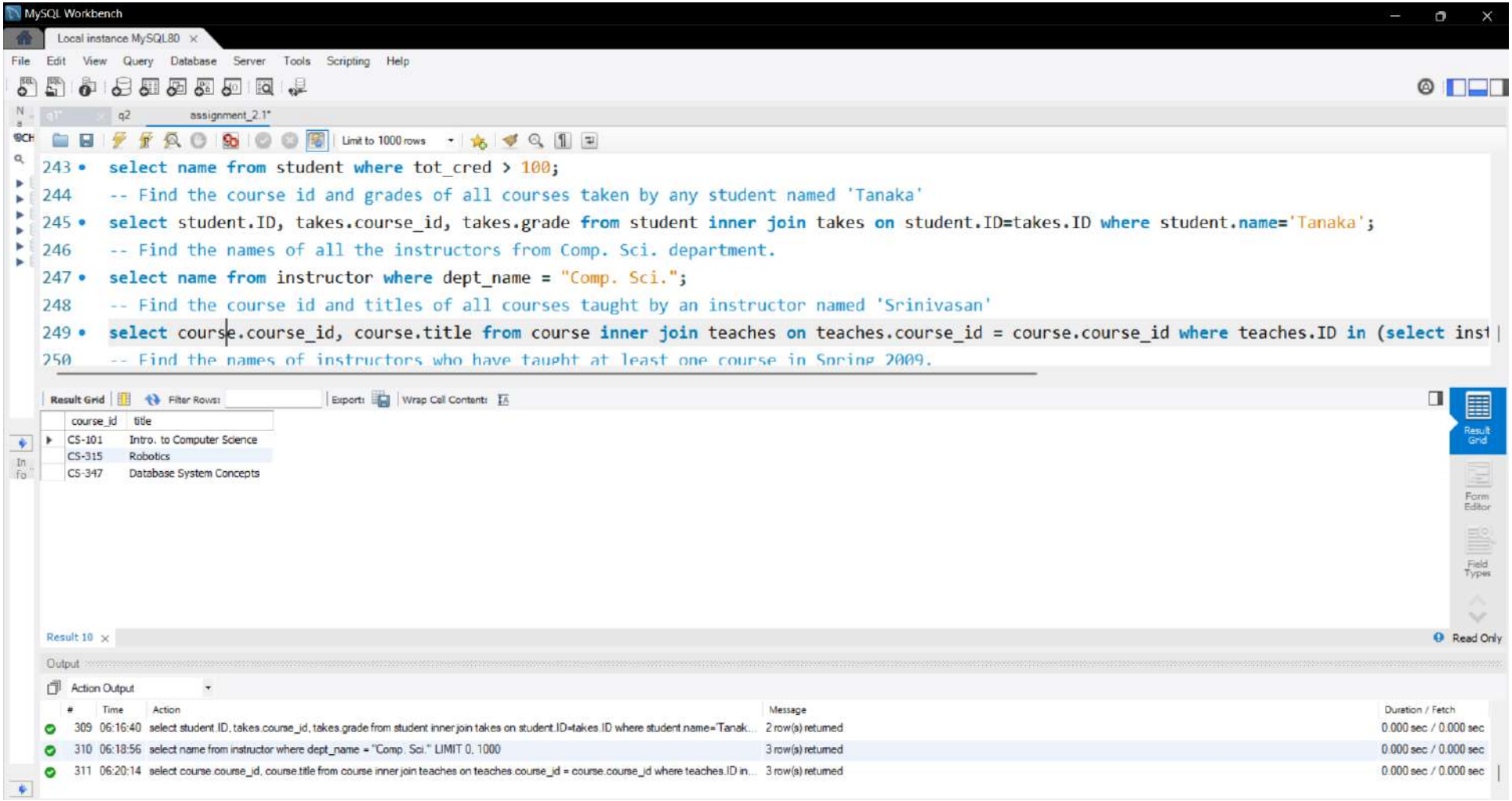
C.Find the names of all the instructors from Comp. Sci. department.

select name from instructor where dept_name = "Comp. Sci.";



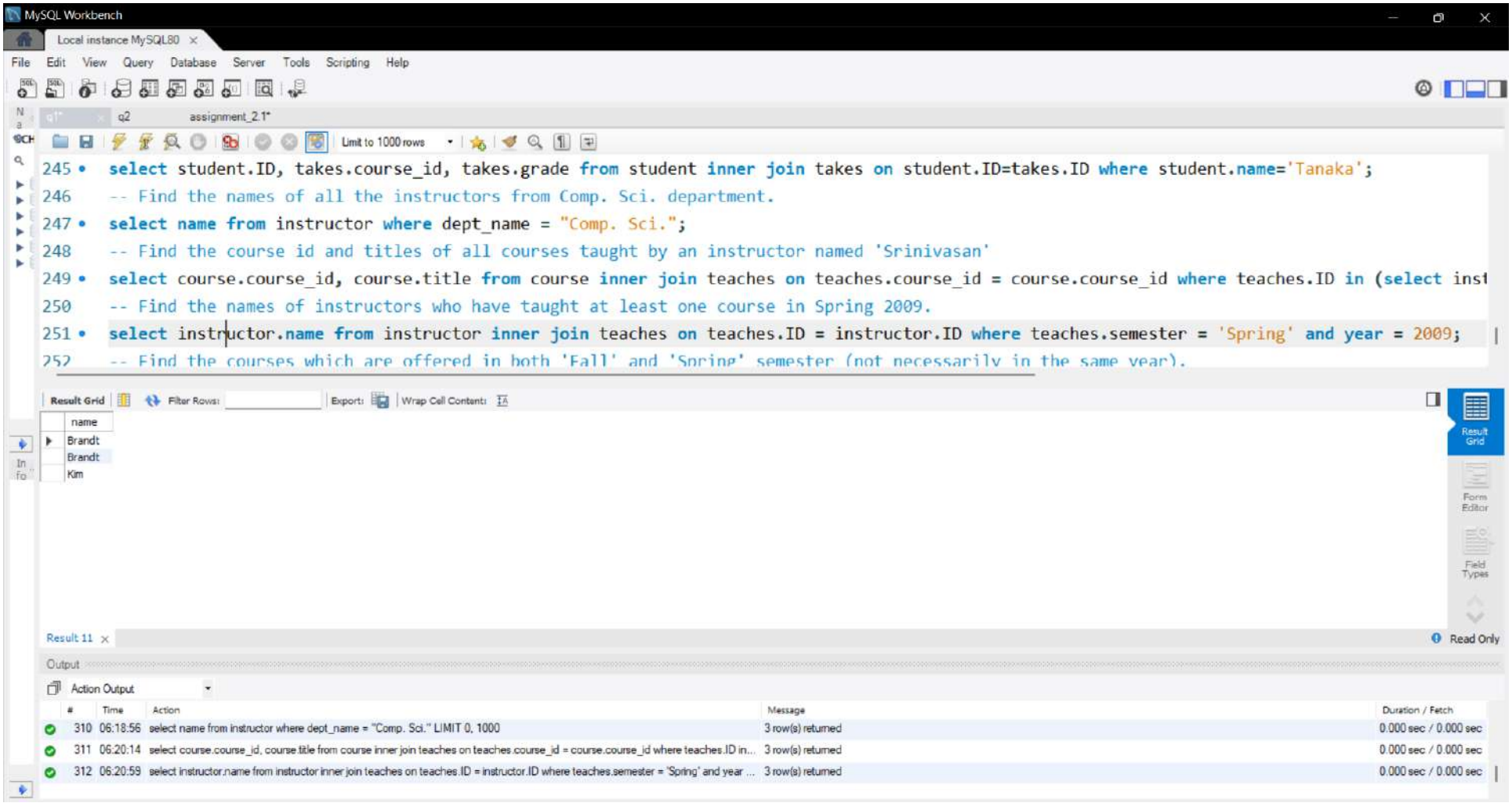
D.Find the course id and titles of all courses taught by an instructor named 'Srinivasan'

select course.course_id, course.title from course inner join teaches on teaches.course_id = course.course_id where teaches.ID in (select instructor.ID from instructor where instructor.name='Srinivasan');



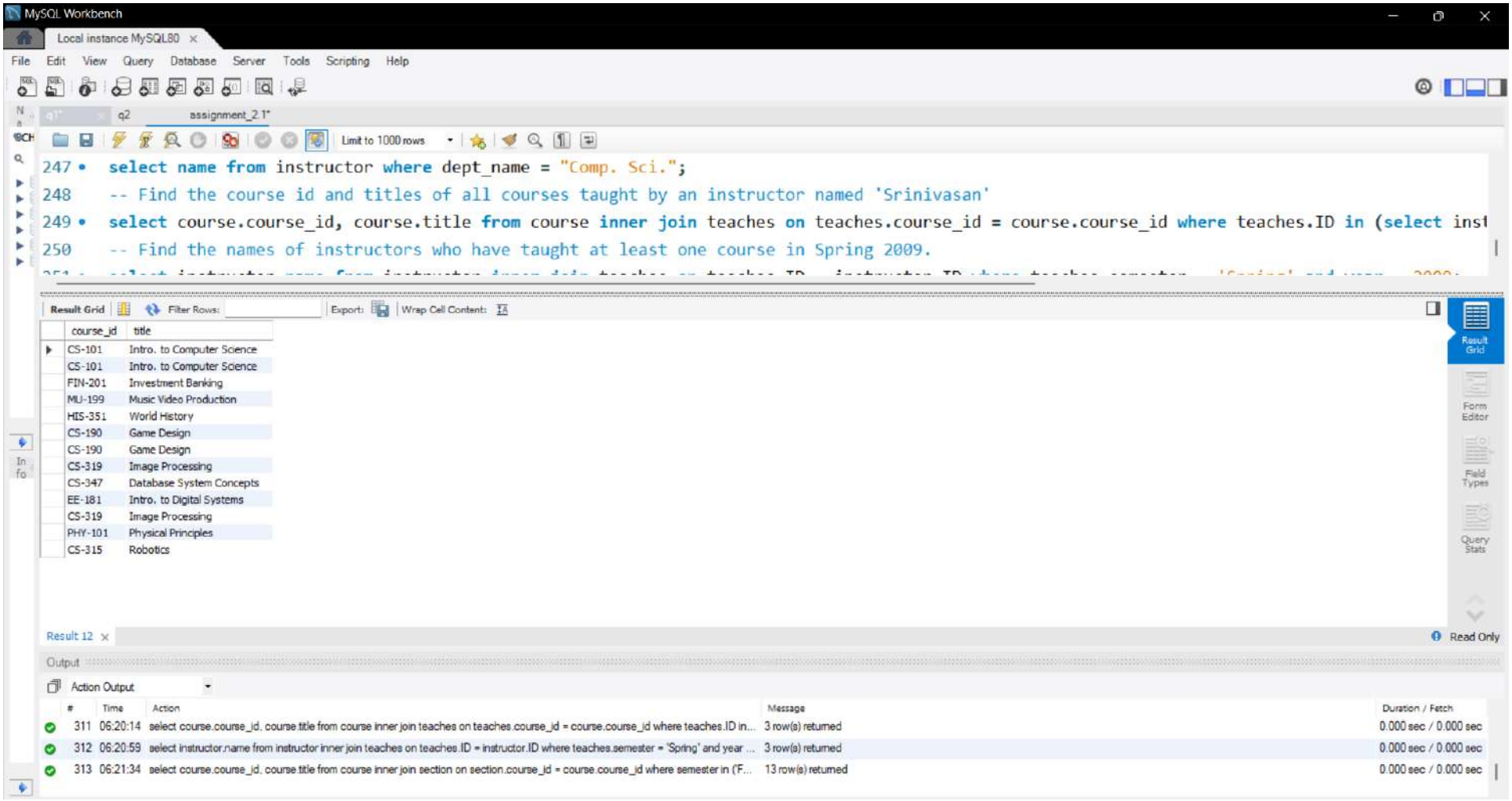
E.Find the names of instructors who have taught at least one course in Spring 2009.

select instructor.name from instructor inner join teaches on teaches.ID = instructor.ID where teaches.semester = 'Spring' and year = 2009;



F.Find the courses which are offered in both 'Fall' and 'Spring' semester (not necessarily in the same year).

select course.course_id, course.title from course inner join section on section.course_id = course.course_id where semester in ('Fall','Spring');



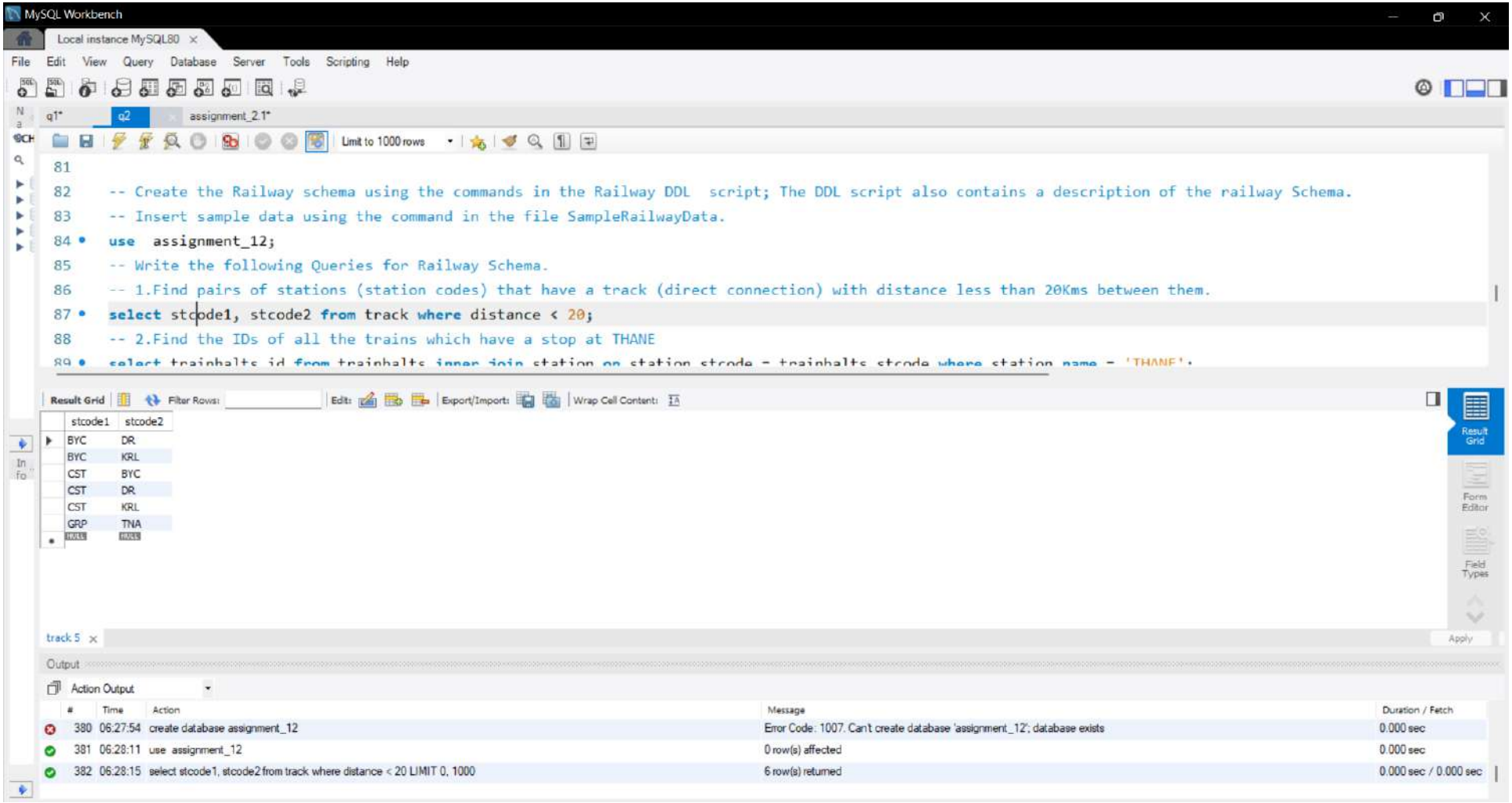
Create the Railway schema using the commands in the Railway DDL script; The DDL script also contains a description of the railway Schema.

Insert sample data using the command in the file SampleRailwayData.

Write the following Queries for Railway Schema.

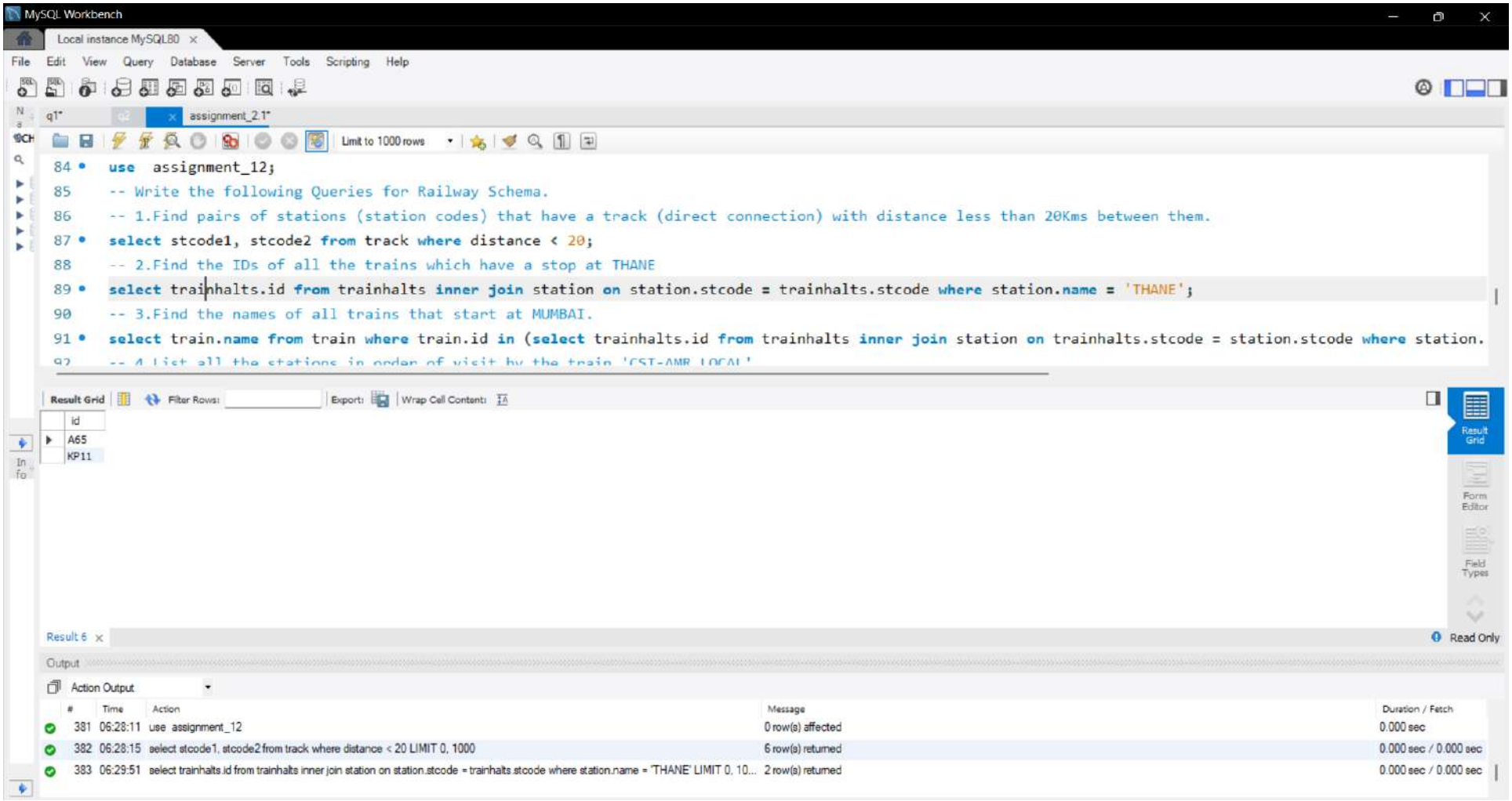
1.Find pairs of stations (station codes) that have a track (direct connection) with distance less than 20Kms between them.

select stcode1, stcode2 from track where distance < 20;



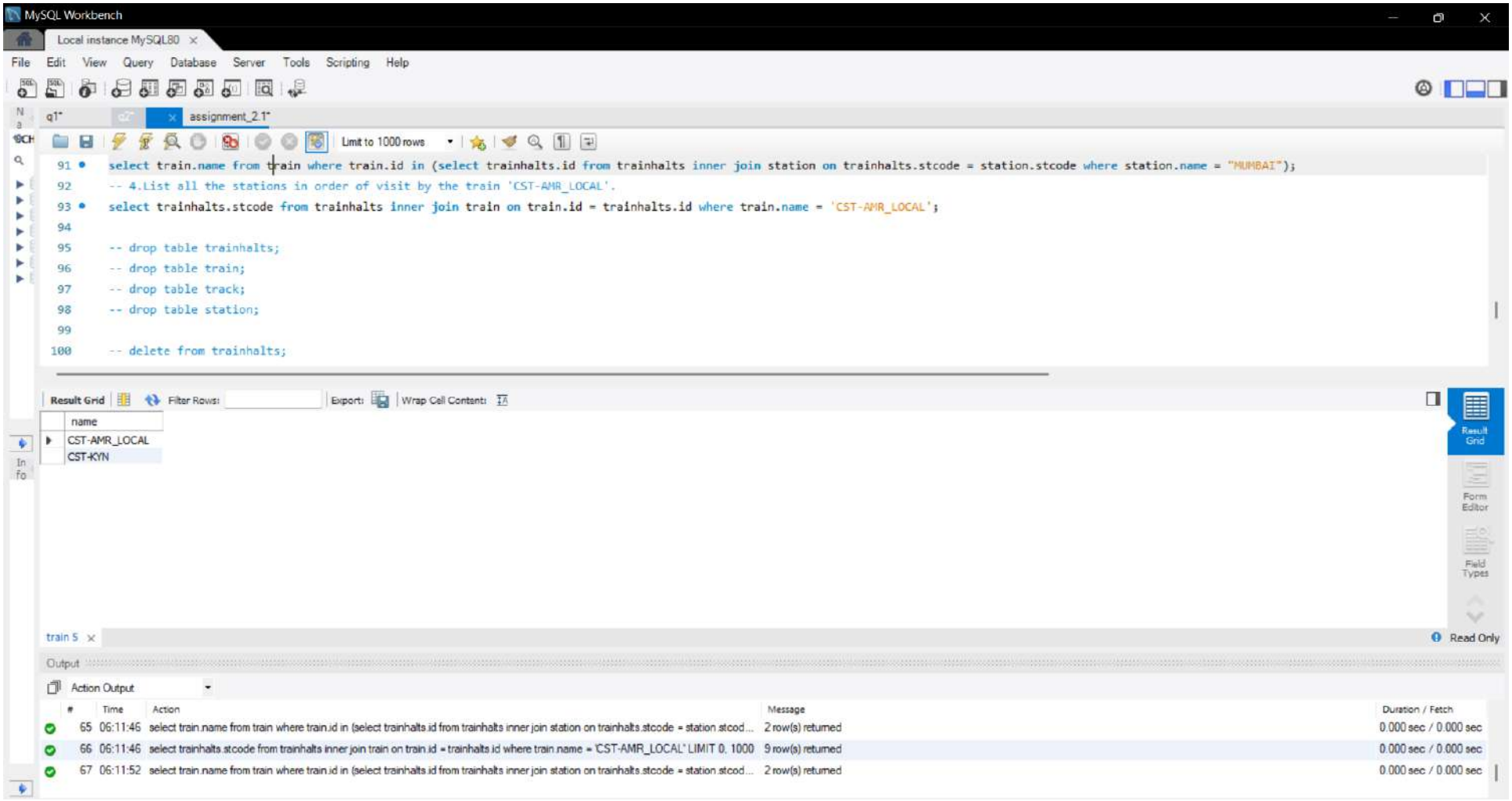
2.Find the IDs of all the trains which have a stop at THANE

select trainhalts.id from trainhalts inner join station on station.stcode = trainhalts.stcode where station.name = 'THANE';



3.Find the names of all trains that start at MUMBAI.

select train.name from train where train.id in (select trainhalts.id from trainhalts inner join station on trainhalts.stcode = station.stcode where station.name = "MUMBAI");



4.List all the stations in order of visit by the train 'CST-AMR_LOCAL'.

select trainhalts.stcode from trainhalts inner join train on train.id = trainhalts.id where train.name = 'CST-AMR_LOCAL';