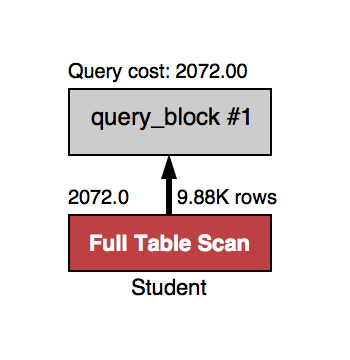
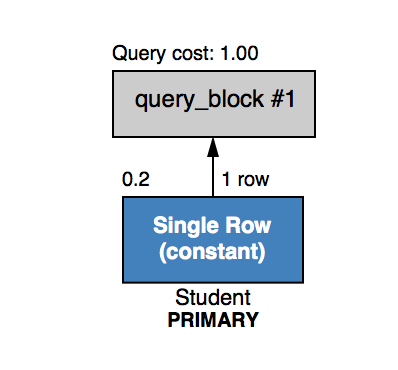
1.List the name of the student with id equal to v1 (id).

(Before Tuning) SELECT name FROM Student WHERE id = 995293;

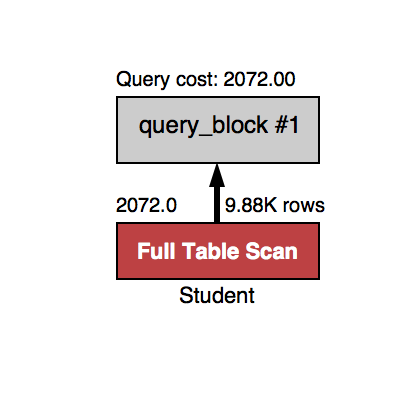


(After Tuning) SELECT name FROM Student WHERE id = 995293;

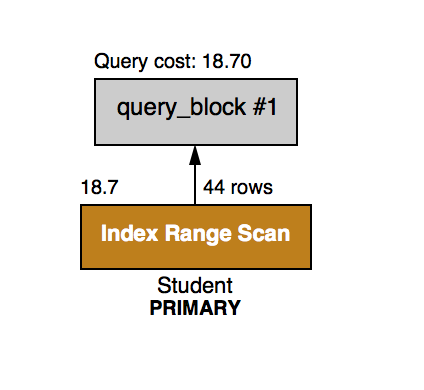


2.List the names of students with id in the range of v2 (id) to v3 (inclusive).

(Before Tuning) SELECT name FROM Student WHERE id >= 131 AND id <= 5379;



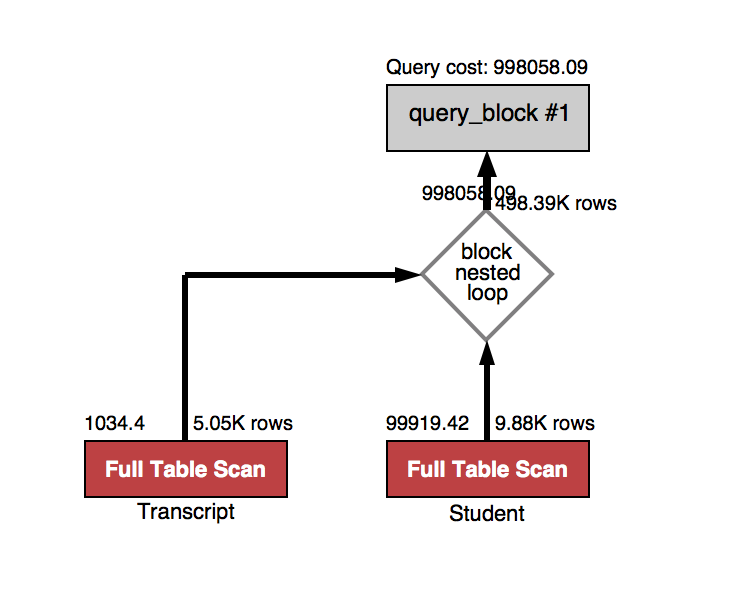
(After Tuning) SELECT name FROM Student WHERE id BETWEEN 131 AND 5379;



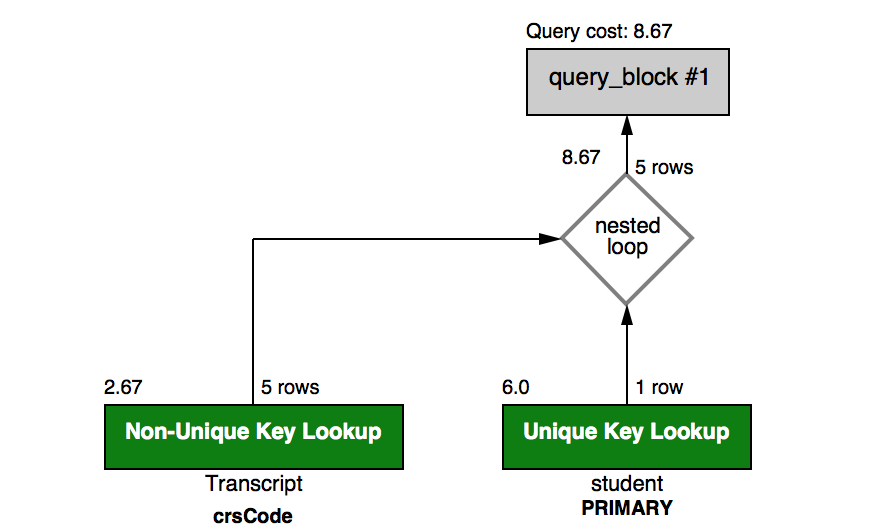
3.List the names of students who have taken course v4 (crsCode).

(Before Tuning) SELECT Student.name FROM Student, Transcript WHERE Student.id =

Transcript.studId AND Transcript.crsCode = 'crsCode579449';



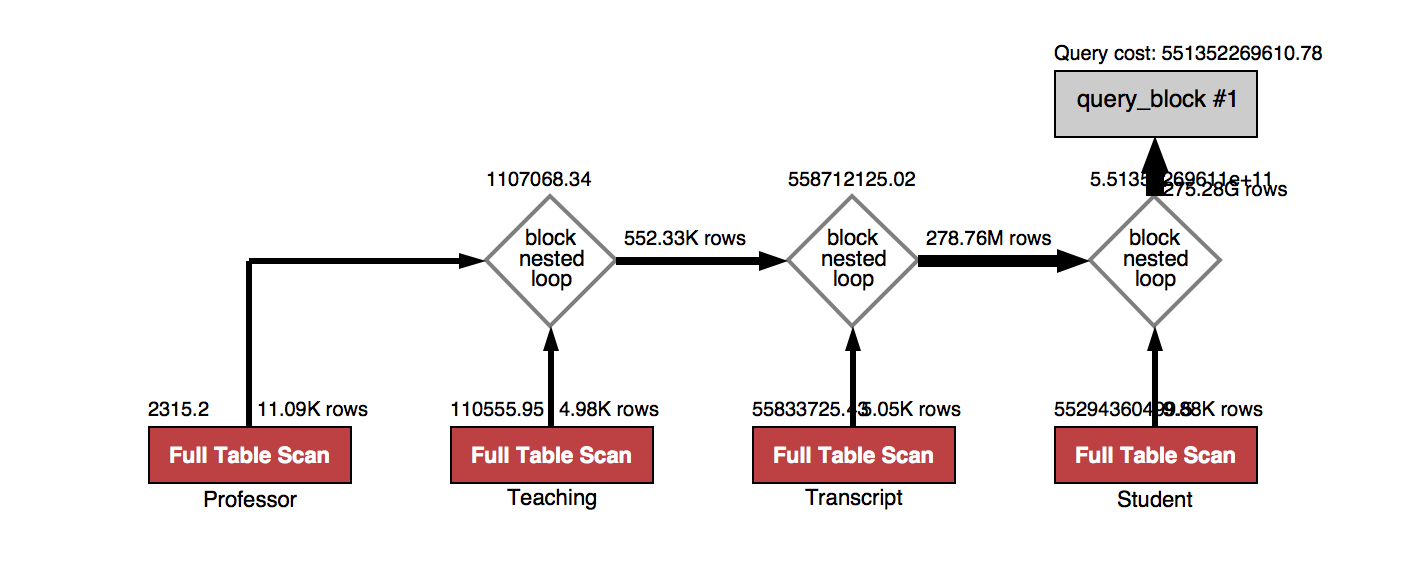
(After Tuning) SELECT name FROM student INNER JOIN (SELECT studId FROM Transcript WHERE crsCode = 'crsCode579449') AS t ON id = t.studId;



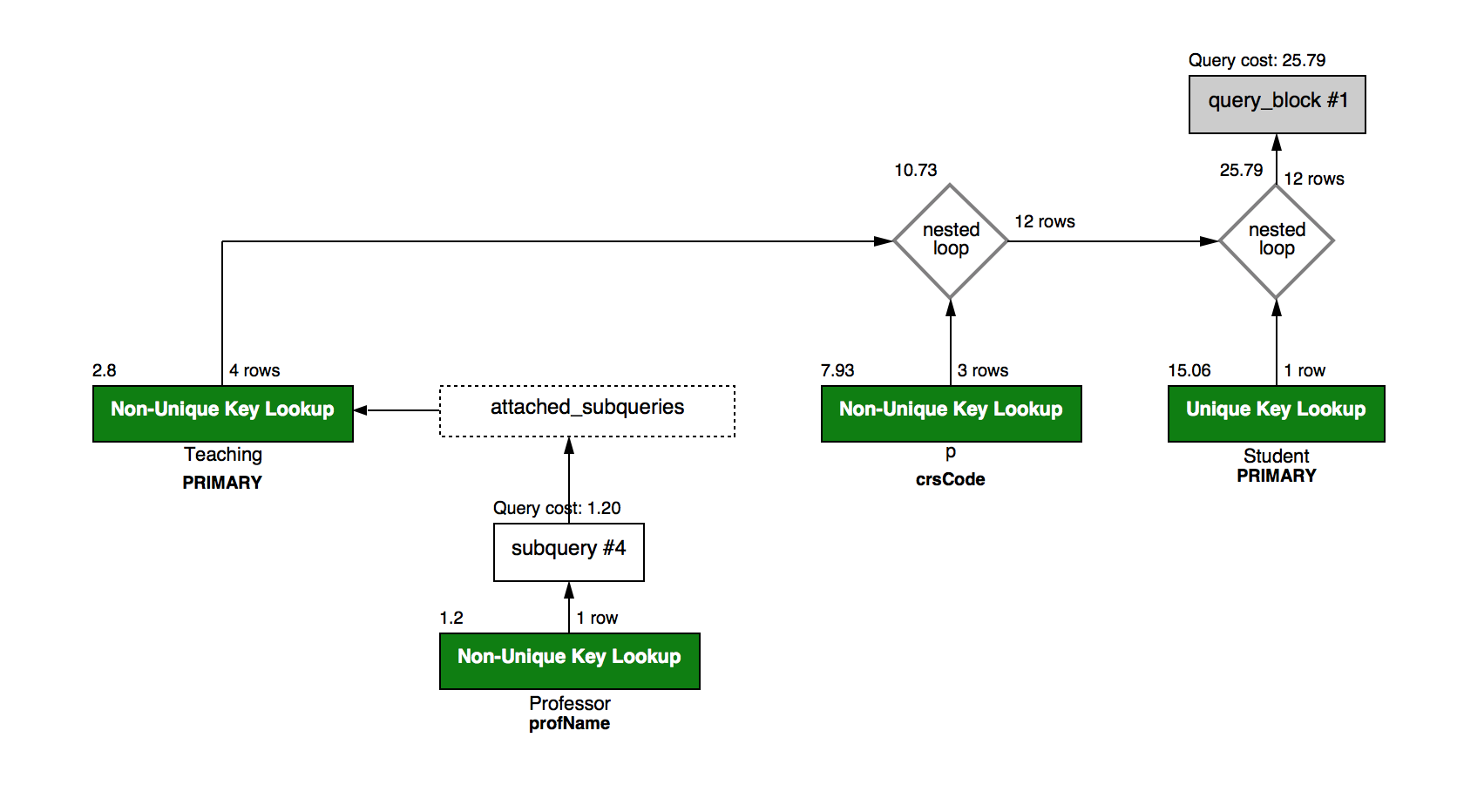
4.List the names of students who have taken a course taught by professor v5 (name).

(Before Tuning) SELECT Student.name, Transcript.crsCode FROM Student, Transcript, Teaching, Professor WHERE Student.id = Transcript.studId AND Professor.id = Teaching.profId AND

Transcript.crsCode = Teaching.crsCode AND Professor.name = 'name260723';

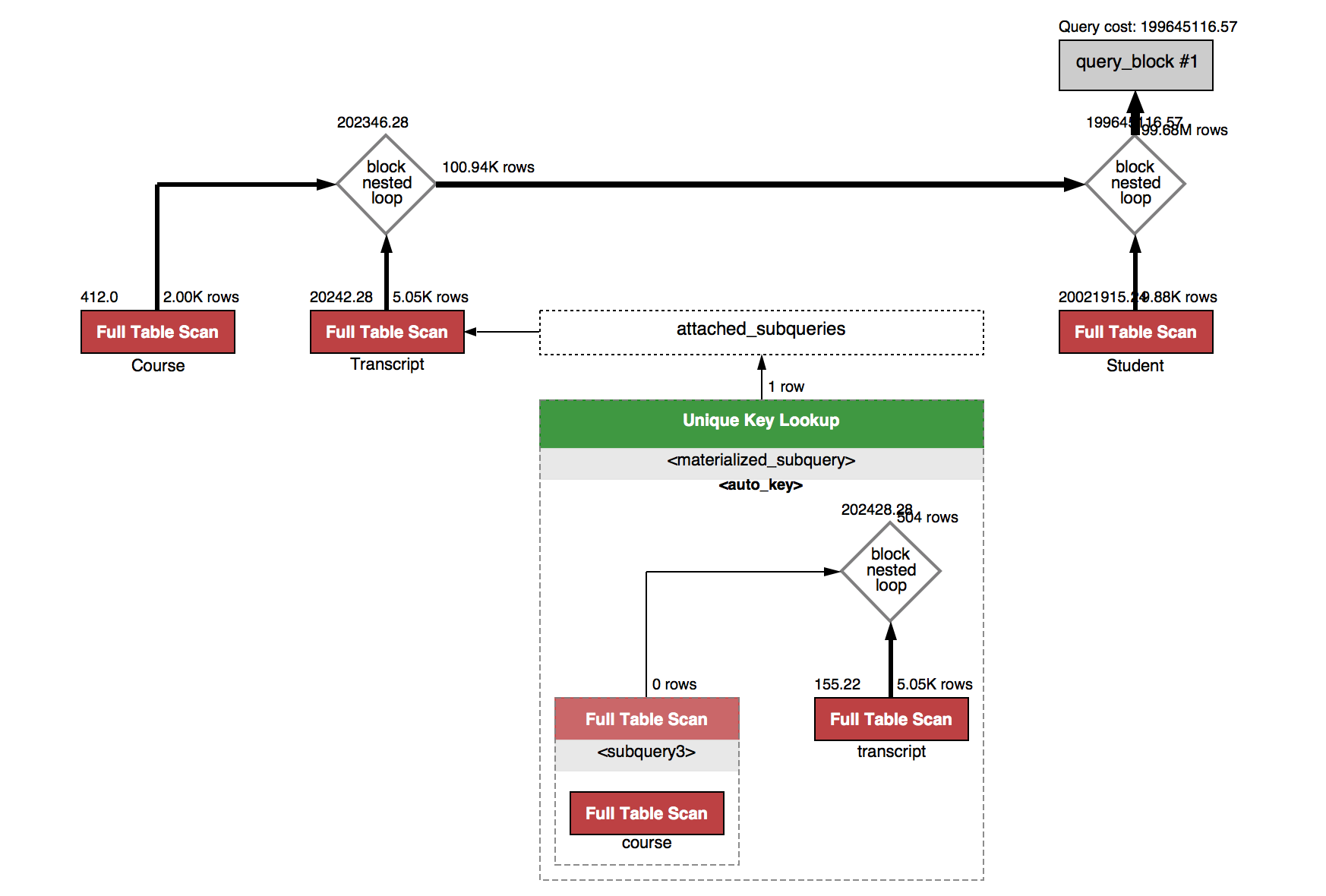


(After Tuning) SELECT name FROM Student INNER JOIN (SELECT studId FROM Transcript p INNER JOIN (select crsCode FROM Teaching WHERE profId = (SELECT id FROM Professor WHERE name = 'name260723')) AS r ON p.crsCode = r.crsCode ) AS t ON id =t.studId;



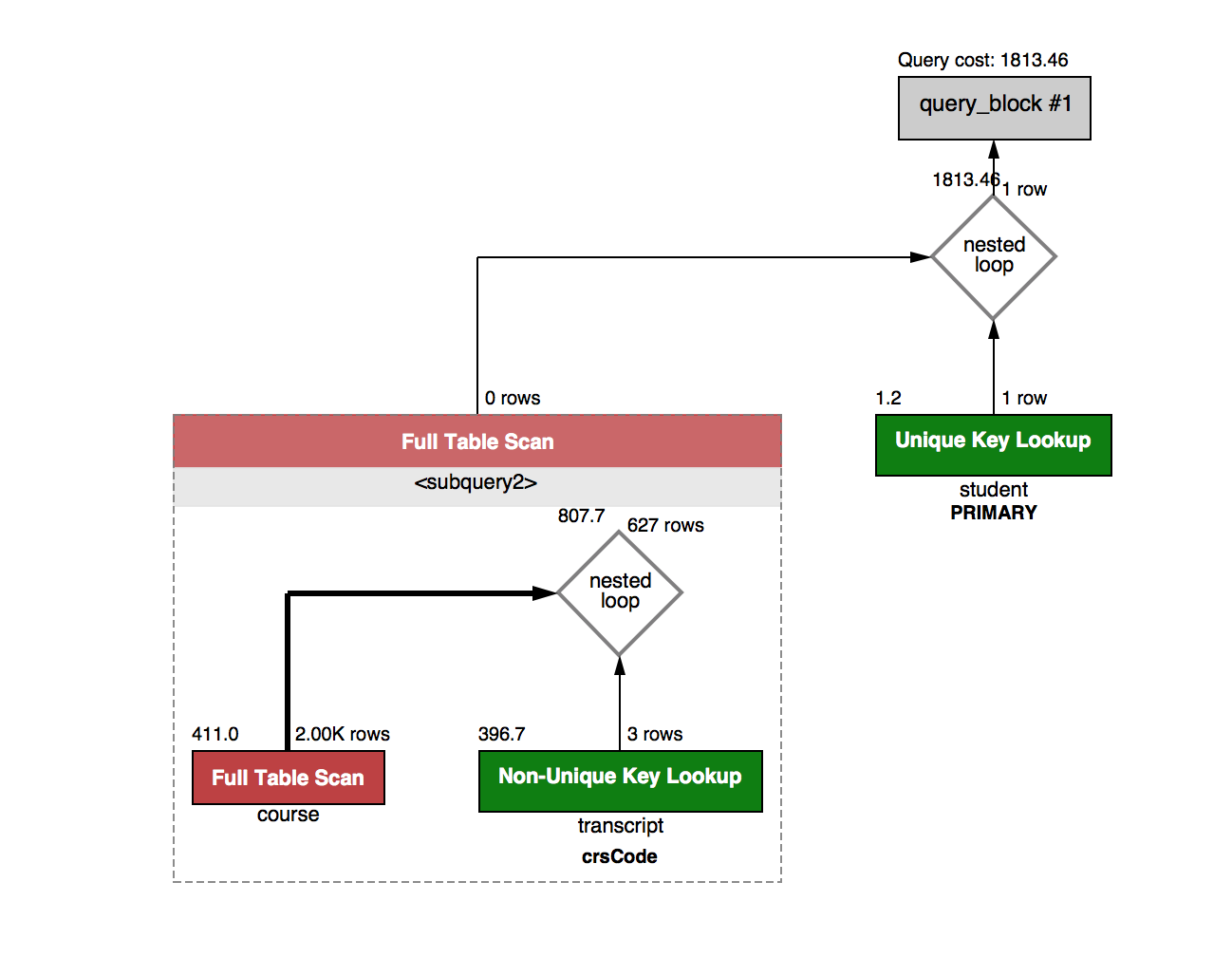
5.List the names of students who have taken a course from department v6 (deptId), but not v7.

(Before Tuning) SELECT Student.name, Transcript.crsCode, Course.deptId FROM Student, Course, Transcript WHERE Student.id = Transcript.studId AND Course.crsCode = Transcript.crsCode AND Course.deptId = "deptId50411" AND student.id not IN (SELECT studId FROM transcript WHERE crsCode IN (SELECT crsCode FROM course WHERE deptId= "deptId563888"));



(After Tuning) SELECT name FROM student WHERE id IN (SELECT studId FROM transcript WHERE crsCode IN (SELECT crsCode FROM course WHERE deptId = 'deptId50411')) AND id not IN ((SELECT studId FROM transcript WHERE crsCode IN (SELECT crsCode FROM course WHERE

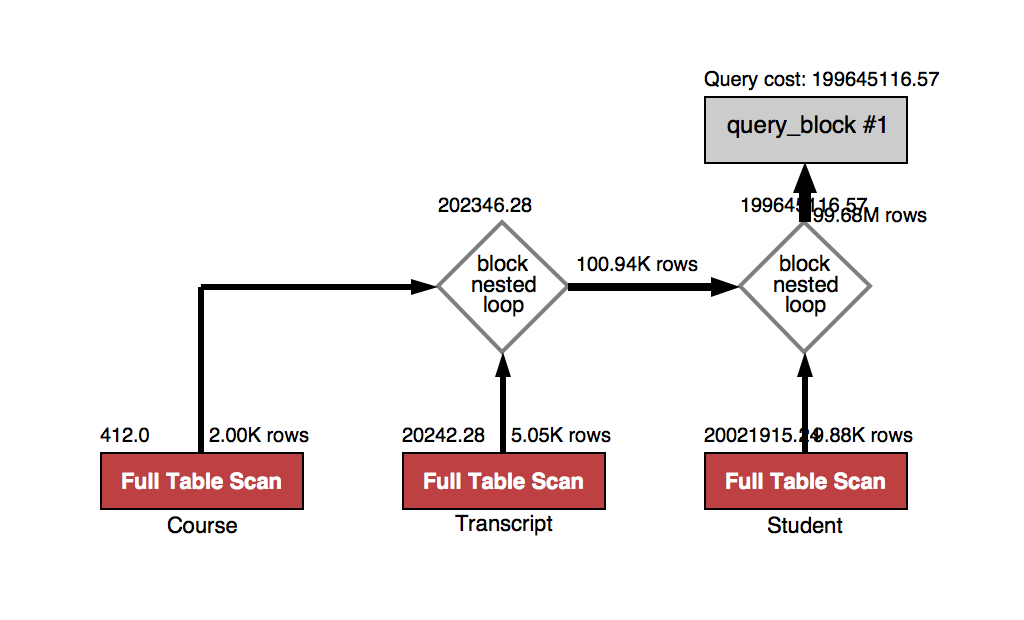
deptId = 'deptId563888')));



6.List the names of students who have taken all courses offered by department v8 (deptId).

(Before Tuning) SELECT Student.name, Transcript.crsCode, Course.deptId FROM Student, Course, Transcript WHERE Student.id = Transcript.studId AND Course.deptId = "deptId597183"

AND course.crsCode = transcript.crsCode;



(After Tuning) SELECT name FROM student s , (SELECT studId FROM transcript t, (SELECT crsCode FROM course WHERE deptId = 'deptId597183' )AS x WHERE t.crsCode = x.crsCode ) AS m WHERE s.id = m.studId;

