**Sheet No : 03**

**Assignment No : 07**

1. **Create a view of all students in dept CSE:**

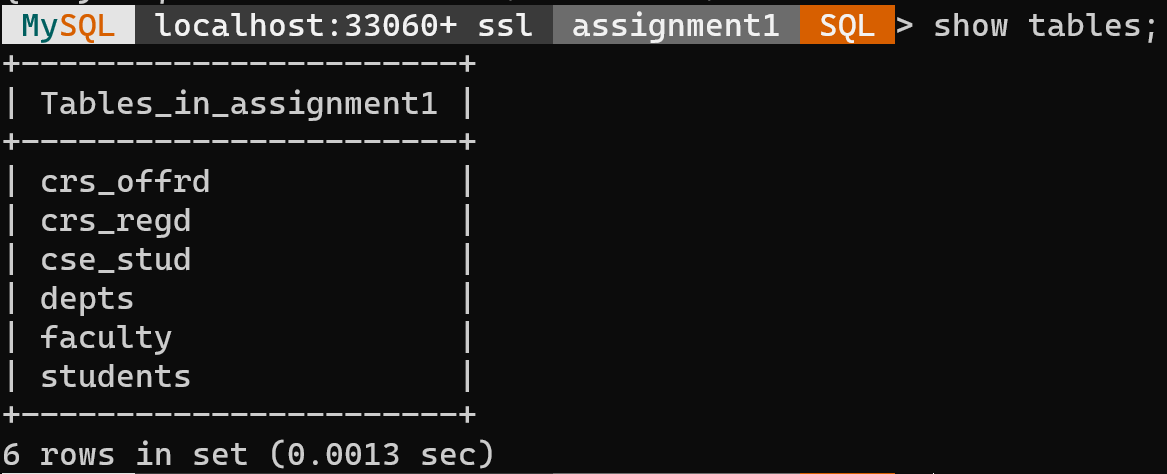
**Query:**

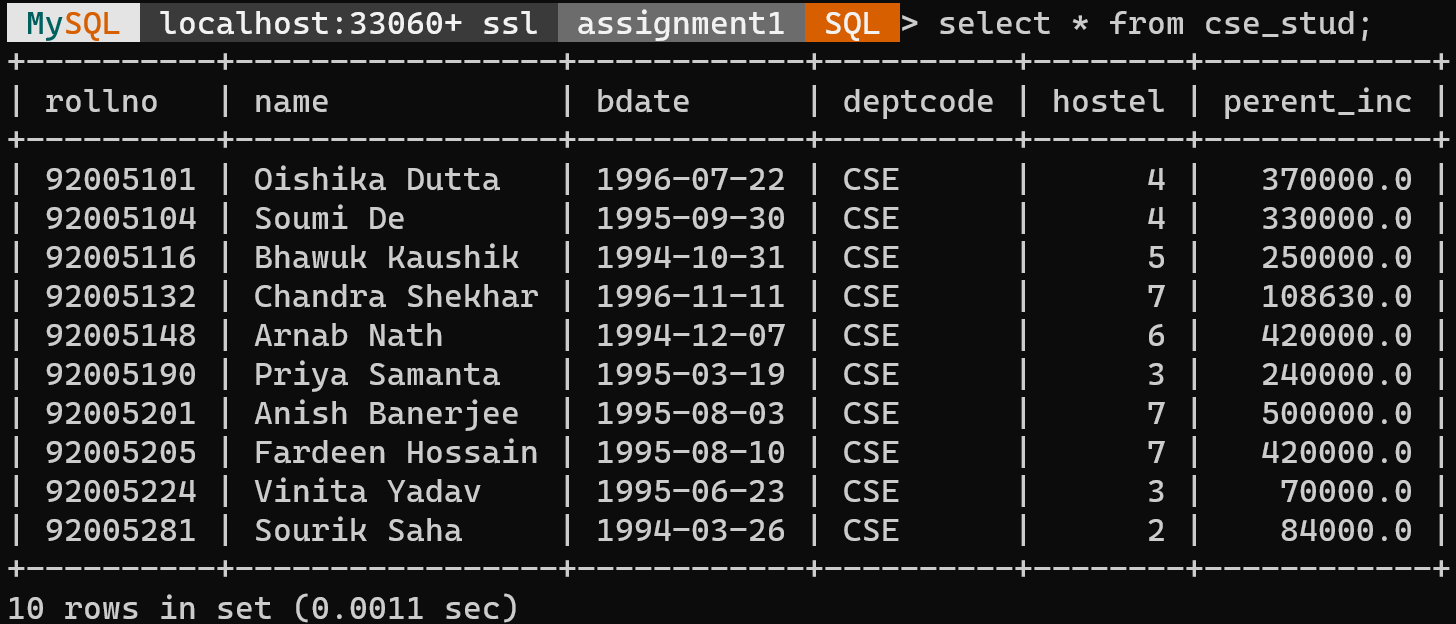
create view cse\_stud as

select \*

from students s

where s.deptcode = 'CSE';





1. **Create a view named as cse\_stud for ‘CSE’ dept students having attributes rollno, name, hostel.**

**Query:**

create or replace view cse\_stud as

select s.rollno, s.name, s.hostel

from students s

where deptcode = 'CSE';

**Output:**



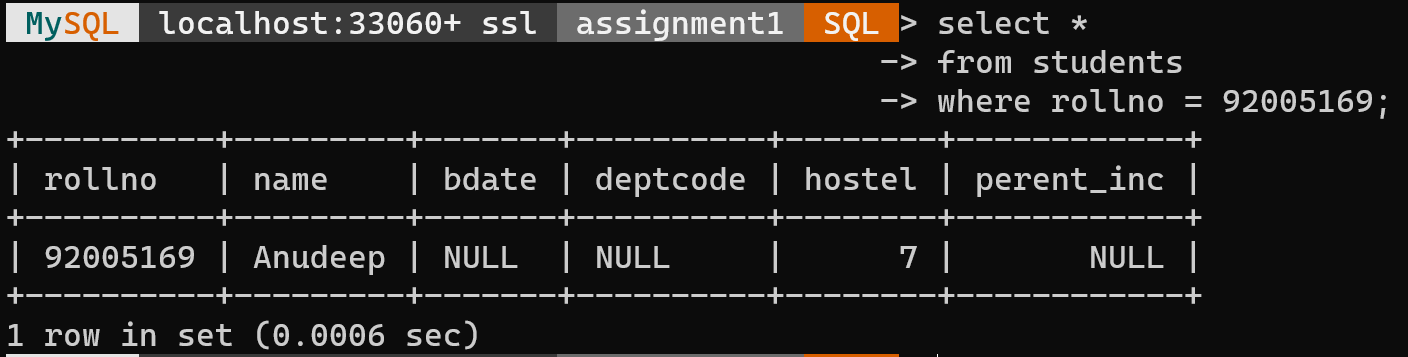
1. **Insert a new student of CSE. Analyse the result.**

**Query:**

insert into cse\_stud values (92005169, 'Anudeep', 7);

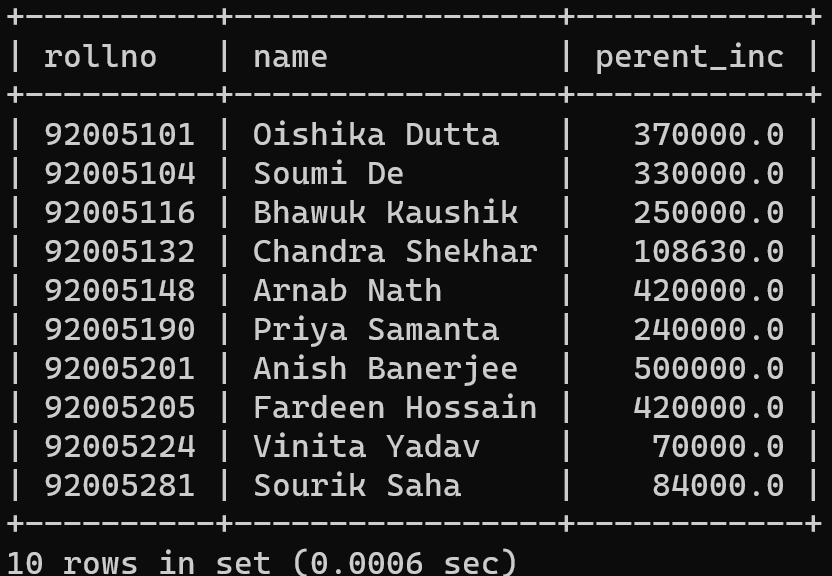


The new inserted value is not present in cse\_stud view. However, this is present in students table but bdate, deptcode and perent\_inc are NULL.



1. **Increment parental income by Rs. 5000 (HRA).**

We created a new view named cse\_stud\_inc to increment the parental income as we cannot alter the parental income from cse\_stud table as perent\_inc column is absent there.

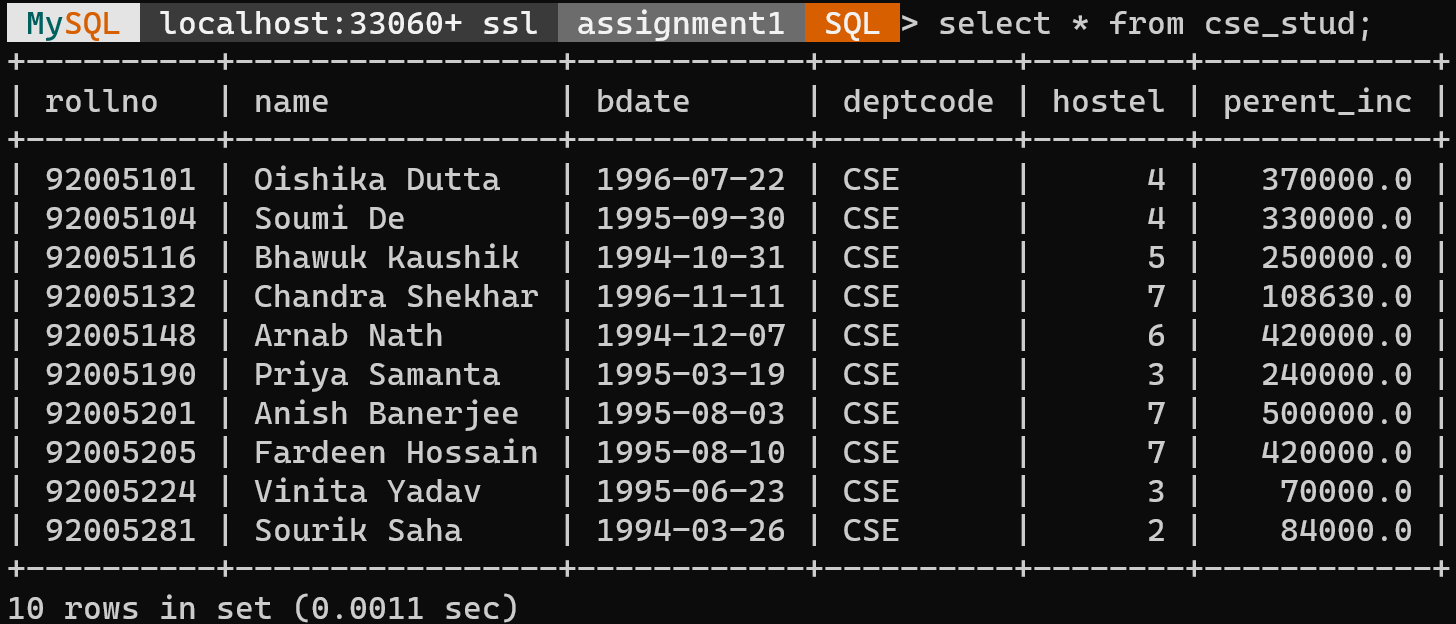


**Query:**

update cse\_stud\_inc

set perent\_inc = perent\_inc + 5000;

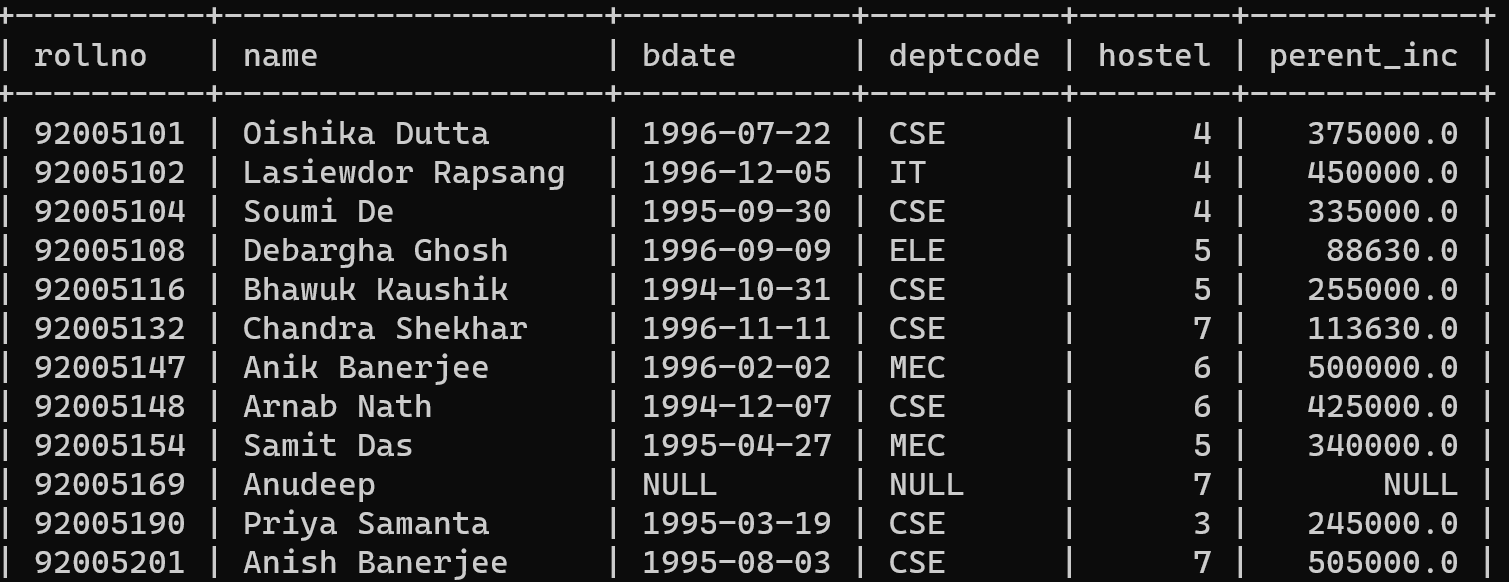
**Before:**



**After:**



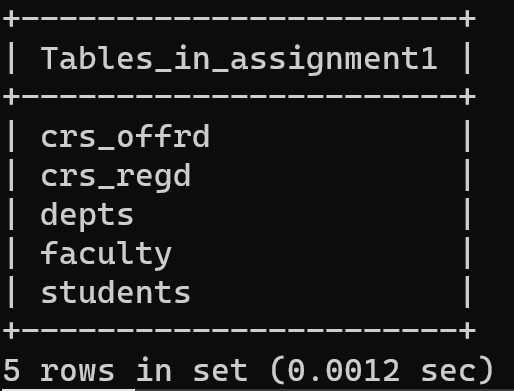
This also makes changes in the students table.



1. **Delete the view.**

**Query:**

Drop view cse\_stud;



**Observation :**

cse\_stud view is deleted. students table retains the update.

**Part – 2**

1. **Create another view of all students in dept Mechanical Engineering (department Name).**

**The view will contain attributes namely Roll-No, Name, Department Name, Age.**

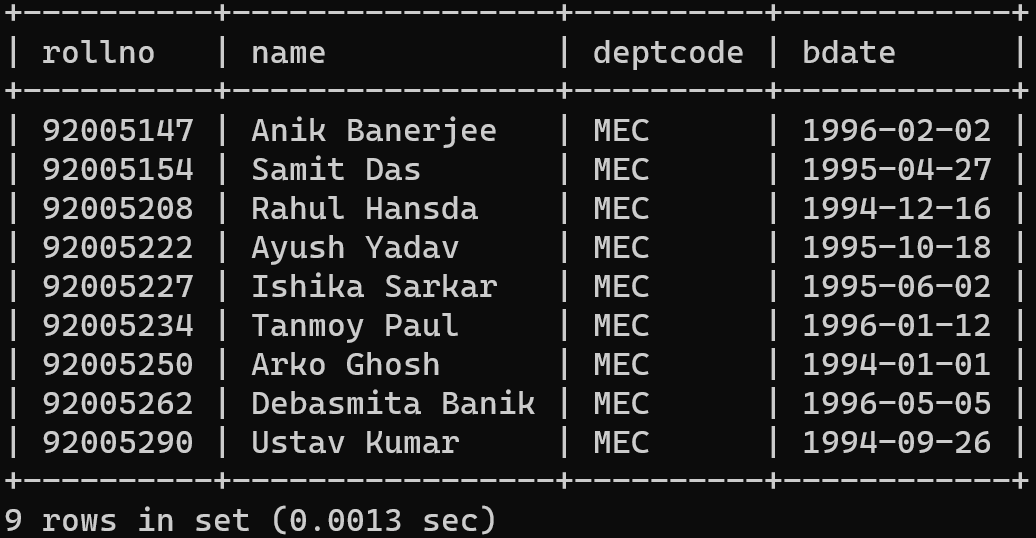
**Query:**

create or replace view me\_stud as

select s.rollno, s.name, s.deptcode, s.bdate

from students s where s.deptcode = 'MEC';

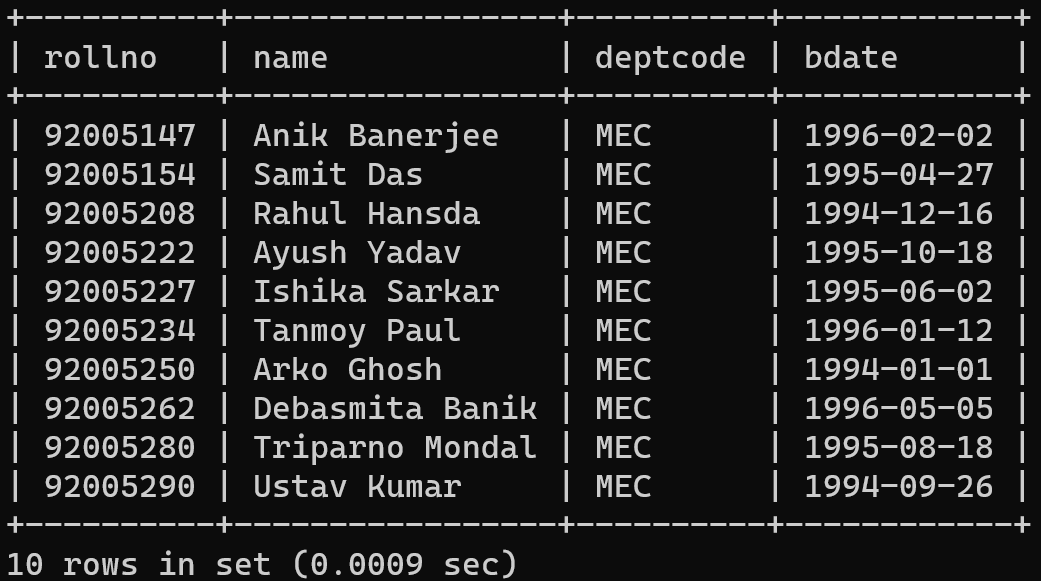
**Output:**



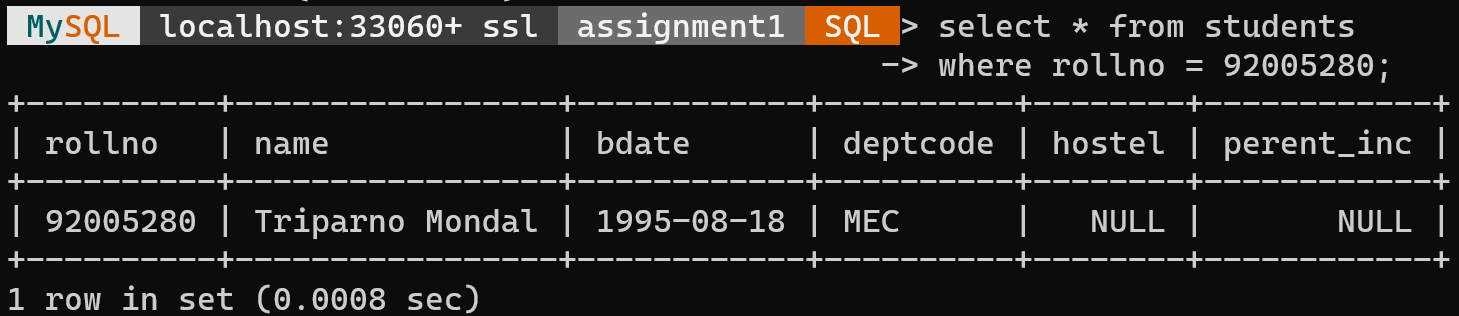
1. **Insert a new student of Mechanical Engineering Department.**

**Query:**

insert into me\_stud values (92005280, ‘Triparno Mondal’, ‘MEC’, ‘1995-08-18’);



No record shows in the view me\_stud. However, it is added in the students table with hostel and perent\_inc having null values.



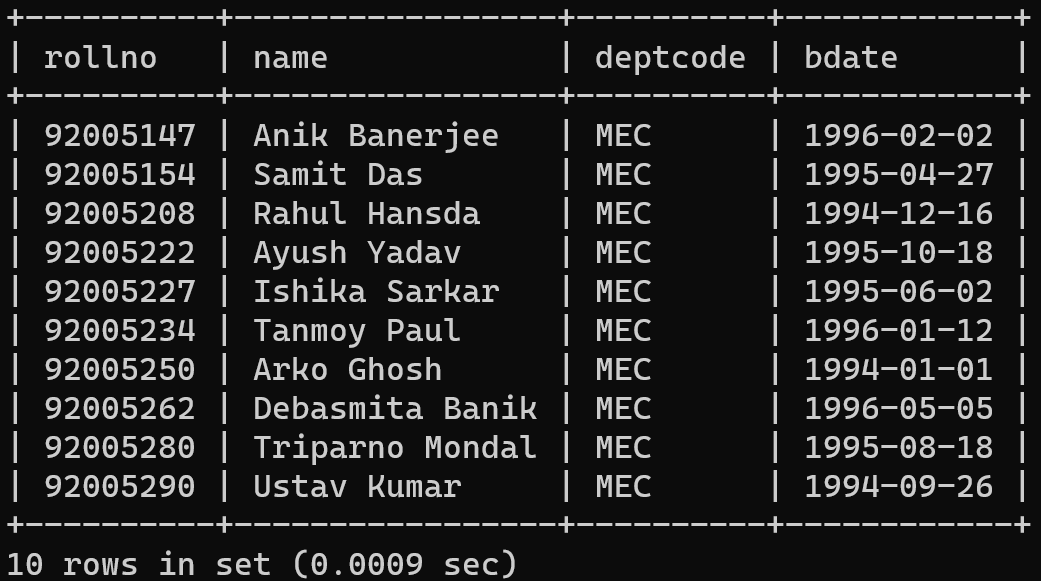
1. **Delete a student (for a given Name) of the same department.**

**Query:**

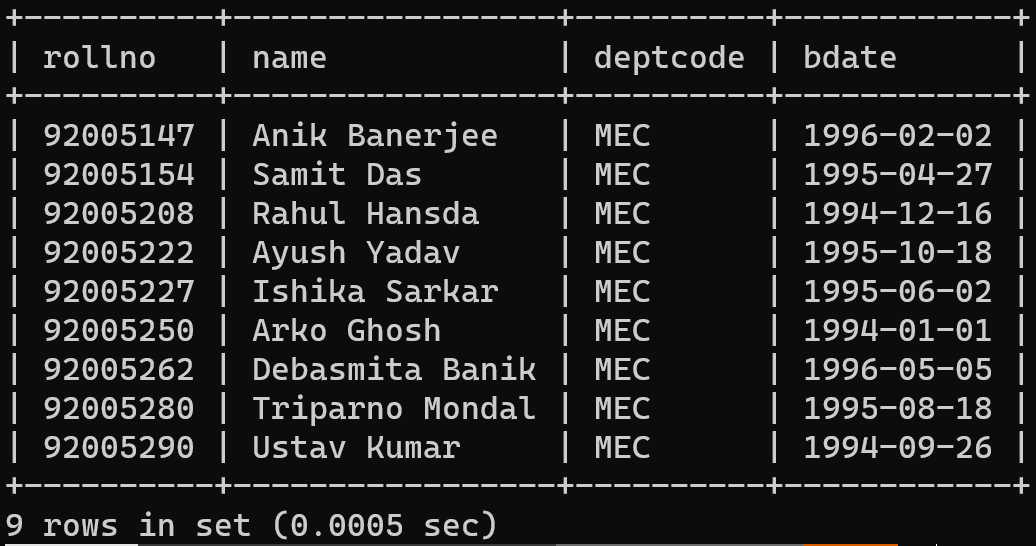
delete from me\_stud

where rollno = 92005234;

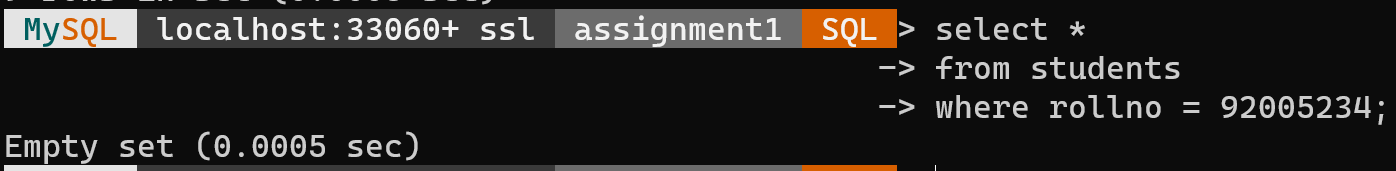
**Before:**



**After:**

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Tuple also got deleted from the students table.



1. **Shift a student (for a given Name) from Mechanical to Computer Science.**

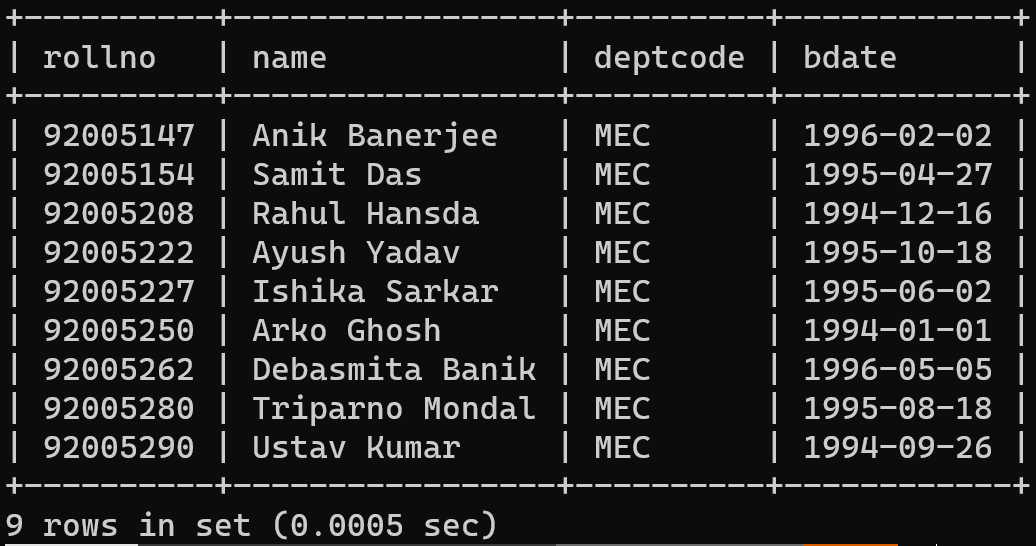
**Query:**

update me\_stud

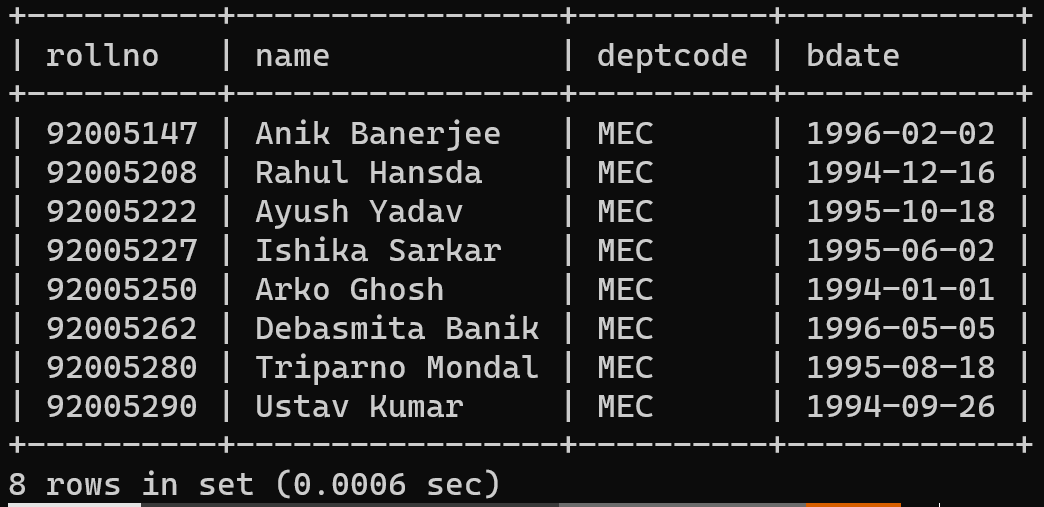
set deptcode = ‘CSE’

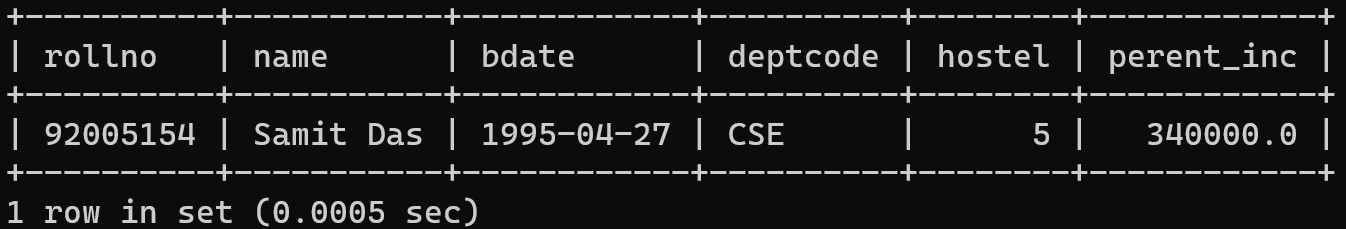
where rollno = 92005154;

**Before:**

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**After:**

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**Inferences:**

**1.** I noticed that when attempting to insert new students directly into the cse\_stud view, the inserted data did not appear in the view. This is because views in MySQL are typically read-only and do not store data. To have the data reflected in the view, it needed to be inserted into the underlying table (students).

**2.** I successfully updated the cse\_stud\_inc(another view which has perent\_inc as a column) view to increment parental income by Rs. 5000, and this update also affected the underlying students table. This illustrates that views are closely tied to the base tables and changes in views propagate to the base tables.

**3.** Deleting the cse\_stud view was straightforward, and it did not impact the underlying table (students).

**4.** I created another view named me\_stud for students in the 'Mechanical Engineering' department.

**5.** Similar behavior was observed when inserting, deleting, and updating data in the me\_stud view as in the case of the cse\_stud view. Changes made in the views directly impacted the underlying tables.