Experiment 2

AIM: - Create a PostgreeSQL Query for Department-Course Subquery and Access Control

Explanation:- Here in this query we will be looking forward to create three tables named Students, Courses and Enrolments with three students named Ashish, Samaran and Vaibhav along with their courses called DBMS, Operating System and Computer Networks and for the Access control we will be creating a user with any name and for granting the permission for any kind of statement like Select statements we will use the keyword Grant and in order to take that granted permission back we will be using the keyword Revoke

Code:

CREATE TABLE Students(student_id INT PRIMARY KEY, name VARCHAR(100), dob DATE);

CREATE TABLE Courses(course_id INT PRIMARY KEY, title VARCHAR(100)); CREATE TABLE Enrollments(enroll_id INT PRIMARY KEY, student_id INT, course_id INT, grade VARCHAR(2), FOREIGN KEY (student_id) REFERENCES Students(student_id), FOREIGN KEY (course_id) REFERENCES Courses(course_id));

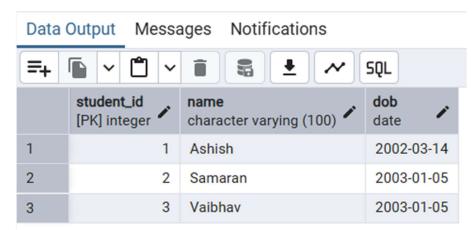
Insert into Students(student_id, name, dob) values(1, 'Ashish', '2002-03-14'), (2, 'Samaran', '2003-01-05'); (3, 'Vaibhav', '2003-01-05'); Insert into Courses(course_id, title) values (101,'DBMS'), (102,'Operating System'), (103, 'Computer Networks'); Insert into Enrollments(enroll_id, student_id, course_id, grade) values (1, 1, 101, 'A'), (2, 1, 102, 'B+');

Select * from Students; Select * from Courses; select * from Enrollments;

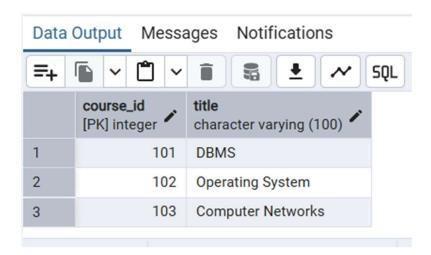
DROP TABLE Courses; DROP TABLE Students; DROP TABLE Enrollments;

OUTPUT:

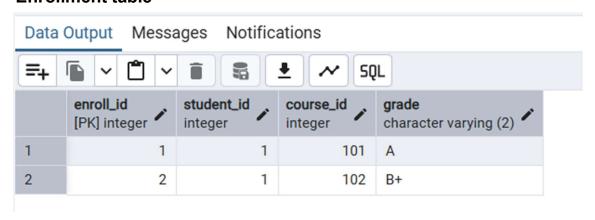
Students table



Courses table



Enrollment table



Savepoint created



Changes made successfully



Final table after the joints are made



Learning Outcomes:

- 1. we learnt how the tables are created and how the values are inserted
- **2.** we learnt how the TCL commands are used (Begin, Savepoint, Rollback, Commit)
- 3. we learnt about joins of the tables