

Task1

Project Title: Academic Management System (using SQL) Project Description:

Design and develop an Academic Management System using SQL. The projects should involve three tables 1.StudentInfo 2. CoursesInfo 3.EnrollmentInfo.

1. Database Creation:

a) Create the StudentInfo table with columns STU_ ID, STU_NAME, DOB, PHONE_NO, EMAIL_ID,ADDRESS.

b) Create the CoursesInfo table with columns COURSE_ID, COURSE_NAME,COURSE_INSTRUCTOR NAME.

c) Create the EnrollmentInfo with columns ENROLLMENT_ID, STU_ ID, COURSE_ID, ENROLL_STATUS(Enrolled/Not Enrolled). The FOREIGN KEY constraint in the EnrollmentInfo table references the STU_ID column in the StudentInfo table and the COURSE_ID column in the CoursesInfo table.

	TIME	COMMAND	MESSAGE	STATUS / RESULT
✓	1 23:44:16	Create Database task 1	1 row(s) affected	0.031 sec
✓	2 23:44:16	use task 1	0 row(s) affected	0.000 sec
✓	3 23:44:16	CREATE TABLE StudentInfo (STU_ID INT PRIMARY KEY, STU_NAME VARCH...	0 row(s) affected	0.047 sec
✓	4 23:44:16	CREATE TABLE CoursesInfo (COURSE_ID INT PRIMARY KEY, COURSE_NAM...	0 row(s) affected	0.047 sec
✓	5 23:44:17	CREATE TABLE EnrollmentInfo (ENROLLMENT_ID INT PRIMARY KEY, STU_ID...	0 row(s) affected	0.031 sec

2. Data Creation:

Insert some sample data for StudentInfo table , CoursesInfo table, EnrollmentInfo with respective fields.

Table - StudentInfo

STU_ID	STU_NAME	DOB	PHONE_NO	EMAIL_ID	ADDRESS
1	Ayush Chauhan	2000-05-10	9876543210	ayush@example.com	Delhi
2	Rishab Sharma	1999-08-22	9823456789	rishab@example.com	Mumbai
3	K Kamal	2001-02-15	9765432101	kamal@example.com	Chennai
NULL	NULL	NULL	NULL	NULL	NULL

Table - CoursesInfo

COURSE_ID	COURSE_NAME	COURSE_INSTRUCTOR_NAME
101	SQL	Yamuna
102	Python	Uma
103	Data Science	Neethu
NULL	NULL	NULL

Table - EnrollmentInfo

Result Grid Filter Rows: <input type="text"/> Edit:				
	ENROLLMENT_ID	STU_ID	COURSE_ID	ENROLL_STATUS
▶	1001	1	101	Enrolled
	1002	1	102	Enrolled
	1003	2	103	Enrolled
	1004	3	101	Not Enrolled
✱	NULL	NULL	NULL	NULL

3) Retrieve the Student Information

a) Write a query to retrieve student details, such as student name, contact informations, and Enrollment status.

Result Grid Filter Rows: <input type="text"/> Export: Wrap Cell Content:				
	STU_NAME	PHONE_NO	EMAIL_ID	ENROLL_STATUS
▶	Ayush Chauhan	9876543210	ayush@example.com	Enrolled
	Ayush Chauhan	9876543210	ayush@example.com	Enrolled
	Rishab Sharma	9823456789	rishab@example.com	Enrolled
	K Kamal	9765432101	kamal@example.com	Not Enrolled

b) Write a query to retrieve a list of courses in which a specific student is enrolled.

Result Grid Filter Rows: <input type="text"/> Export: Wrap Cell Content:				
	COURSE_NAME			
▶	SQL			
	Python			

c) Write a query to retrieve course information, including course name, instructor information.

Result Grid Filter Rows: <input type="text"/> Export: Wrap Cell Content:				
	COURSE_NAME	COURSE_INSTRUCTOR_NAME		
▶	SQL	Yamuna		
	Python	Uma		
	Data Science	Neethu		

d) Write a query to retrieve course information for a specific course .

Result Grid	Filter Rows:	Edit:	Export
	COURSE_ID	COURSE_NAME	COURSE_INSTRUCTOR_NAME
▶	102	Python	Uma
✱	NULL	NULL	NULL

e) Write a query to retrieve course information for multiple courses.

Result Grid

Filter Rows:

Edit:

Export/Import:

Wrap Cell Content:

	COURSE_ID	COURSE_NAME	COURSE_INSTRUCTOR_NAME
▶	101	SQL	Yamuna
	103	Data Science	Neethu
✱	NULL	NULL	NULL

4. Reporting and Analytics (Using joining queries)

a) Write a query to retrieve the number of students enrolled in each course.

Result Grid

Filter Rows:

Export:

Wrap Cell Content:

	COURSE_NAME	num_students
▶	SQL	1
	Python	1
	Data Science	1

b) Write a query to retrieve the list of students enrolled in a specific course.

Result Grid





Filter Rows:

Export:

Wrap Cell Content:

	STU_NAME	EMAIL_ID
▶	Ayush Chauhan	ayush@example.com



c) Write a query to retrieve the count of enrolled students for each instructor.

Result Grid   Filter Rows: <input type="text"/>			Export: 	Wrap Cell Content: 
	COURSE_INSTRUCTOR_NAME	student_count		
▶	Yamuna	1		
	Uma	1		
	Neethu	1		

d) Write a query to retrieve the list of students who are enrolled in multiple courses.

Result Grid   Filter Rows: <input type="text"/>			Export: 	Wrap Cell Content: 
	STU_NAME	courses_enrolled		
▶	Ayush Chauhan	2		

e) Write a query to retrieve the courses that have the highest number of enrolled students(arranging from highest to lowest).

Result Grid   Filter Rows: <input type="text"/>				
	Course_Name	Student_Count		
▶	SQL	1		
	Python	1		
	Data Science	1		