

1. View All Students:

```
select * from Students;
```

output:

	StudentID	StudentName	Email	DOB	DepartmentID
1	1	Aarav Shah	aarav.shah@example.com	2002-03-15	1
2	2	yashvi	y@gmail.com	23-7-04	2

View All Courses:

```
Select * from Course;
```

	CourseID	CourseName	Credits	DepartmentID	TeacherID
1	NULL	Database Systems	4	1	NULL
2	NULL	Linear Algebra	3	2	NULL
3	NULL	Quantum Mechanics	4	3	NULL

2. View Students from Department 1

```
SELECT * FROM Students WHERE DepartmentID = 1;
```

Output:

	StudentID	StudentName	Email	DOB	DepartmentID
1	1	Aarav Shah	aarav.shah@example.com	2002-03-15	1

3. Search Students with Name Like 'y%'

```
SELECT * FROM Students WHERE StudentName LIKE 'y%';
```

Output:

	StudentID	StudentName	Email	DOB	DepartmentID
1	2	yashvi	y@gmail.com	23-7-04	2

4. List Courses with Credits Between 3 and 4

```
SELECT * FROM Courses WHERE Credits BETWEEN 3 AND 4;
```

Output:

	CourseID	CourseName	Credits	DepartmentID	TeacherID
1	NULL	Database Systems	4	1	NULL
2	NULL	Linear Algebra	3	2	NULL
3	NULL	Quantum Mechanics	4	3	NULL

5. Sort Students by Name (Ascending)

```
SELECT * FROM Students ORDER BY StudentName ASC;
```

Output:

	StudentID	StudentName	Email	DOB	DepartmentID
1	1	Aarav Shah	aarav.shah@example.com	2002-03-15	1
2	2	yashvi	y@gmail.com	23-7-04	2

6.Sort Courses by Credits (Descending)

```
SELECT * FROM Courses ORDER BY Credits DESC;
```

Output:

	CourseID	CourseName	Credits	DepartmentID	TeacherID
1	NULL	Database Systems	4	1	NULL
2	NULL	Quantum Mechanics	4	3	NULL
3	NULL	Linear Algebra	3	2	NULL

7. Show Only Student Names and Emails

```
SELECT StudentName, Email FROM Students;
```

Output:

	StudentName	Email
1	Aarav Shah	aarav.shah@example.com
2	yashvi	y@gmail.com

9. List First 2 Courses Only (LIMIT)

SELECT * FROM Courses LIMIT 1;

Output:

	CourseID	CourseName	Credits	DepartmentID	TeacherID
1	NULL	Database Systems	4	1	NULL

10. Find Courses in Departments 1 and 2

SELECT * FROM Courses WHERE DepartmentID IN (2);

Output:

	CourseID	CourseName	Credits	DepartmentID	TeacherID
1	NULL	Linear Algebra	3	2	NULL