**COMPUTER SCIENCE DEPARTMENT**

**Total Marks:**

**Obtained Marks:**

LAB: Database System

# LAB TASK

**Submitted To: Mam Kashia Riaz Date of Submission: 23-December-2024**

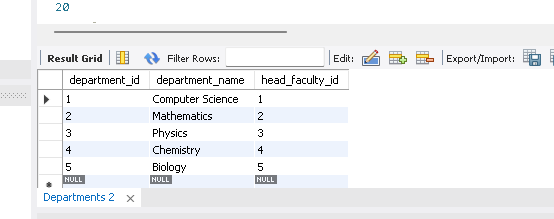
# Ubaid Bin Waris

# 2212416

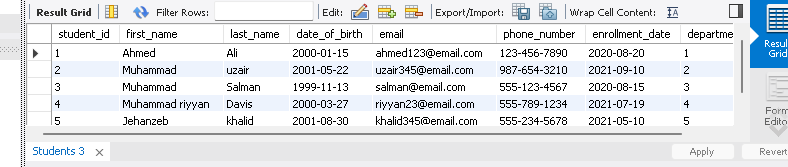
**University Database Sytem**

There are five table in the university Database System.

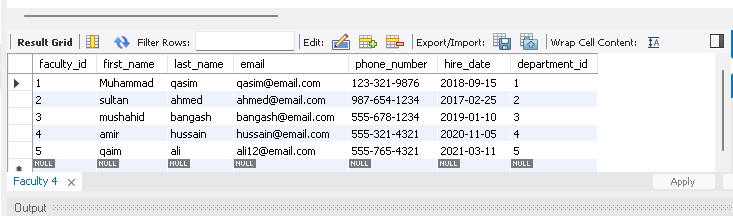
1. **Department Table**

****

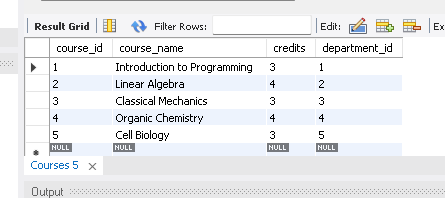
1. **Students Table**

****

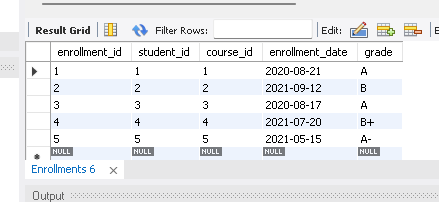
1. **Faculty Table**

****

1. **Courses Table**

****

1. **Enrollments**

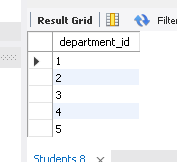
****

**5 Queries**

1. **Distinct Queries**

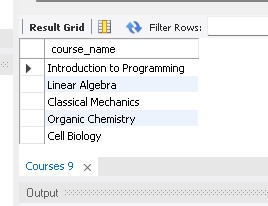
SELECT DISTINCT department\_id

FROM Students;

****

SELECT DISTINCT course\_name

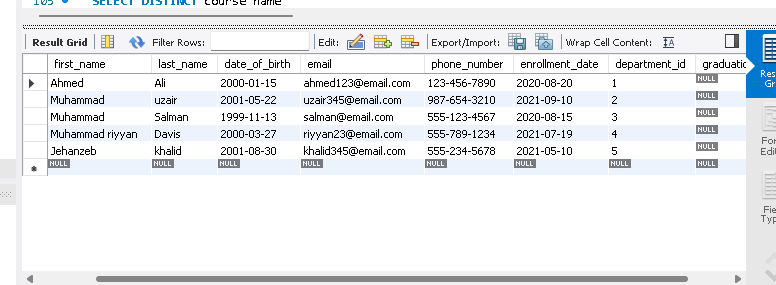
FROM Courses;



1. **Alter Queries**

ALTER TABLE Students

ADD COLUMN graduation\_year INT;

****

1. **Sub Queries**

SELECT first\_name, last\_name

FROM Faculty

WHERE department\_id = (

SELECT department\_id

FROM Departments

WHERE department\_name = 'Computer Science'

);



1. **Aggregate Queries**

SELECT MAX(grade) AS highest\_grade

FROM Enrollments

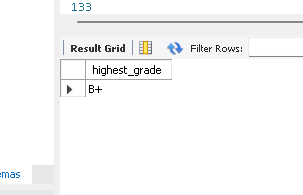
WHERE course\_id = (

SELECT course\_id

FROM Courses

WHERE course\_name = 'Organic Chemistry'

);

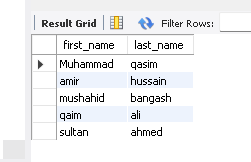


1. **Order by Queries**

SELECT first\_name, last\_name

FROM Faculty

ORDER BY last\_name DESC;



SELECT first\_name, last\_name

FROM Students

ORDER BY last\_name ASC, first\_name ASC;

