



**COMSATS UNIVERSITY ISLAMABAD
ATTOCK CAMPUS**

MID LAB REPORT

DATABASE SYSTEM

Student Name	Syed Kamran Abbas
Registration Number	FA22-BCE-008
Program	COMPUTER ENGINEERING
Semester	BSCE-5

GitHub Profile:- <https://github.com/KAMRAN905>

Q1. Create and analyze a database for managing student grades in AIS Access. (50 Marks)
(CLOS: Analyze techniques for transaction processing, concurrency control, backup and recovery that maintain data integrity on database systems (L2) J

Requirements:

1. Tables:

a) A Students table with fields: StudentID (Primary Key, AutoNumber).

FirstName (Text), LastName (Text), and Class (Text)

b) A Courses table with fields: CourseID (Primary Key, AutoNumber), CourseName (Text), and Credits (Number).

c) A Grades table with fields: GradeID (Primary Key, AutoNumber) StudentID (Foreign Key), CourseID (Foreign Key), and Grade (Text).

2. Relationships:

- Link the Students and Grades tables by StudentID
- Link the Courses and Grades tables by CourseID

3. Form:

- Create a form called StudentGradesForm to enter and view grades for each student.

4. Query:

- Create a query named GradeReport that lists each student's full name, class, course name, and grade.

5. Report

- Create a report called StudentGradeReport that displays the query results in a printable format Table

1. Tables

Student table

	StudentID	First Name	Last Name	Class	Add New Field
+	1	Kamran	Abbas	BCE-1	
+	2	Mushaf	Khan	BEE-3	
+	3	Qasim	Khan	BEE-7	
+	4	Sami	Khan	BAF-5	
*	(New)				

Design View

Field Name	Data Type	
StudentID	AutoNumber	
First Name	Text	
Last Name	Text	
Class	Text	

Course Table

	Course ID	Course Name	Credits	Add New Field	
+	1	Database System	4		
+	2	Principle of Computer	4		
+	3	Operating System	3		
+	4	Rws	3		
	(New)				

Design View

Field Name	Data Type	
Course ID	AutoNumber	
Course Name	Text	
Credits	Number	

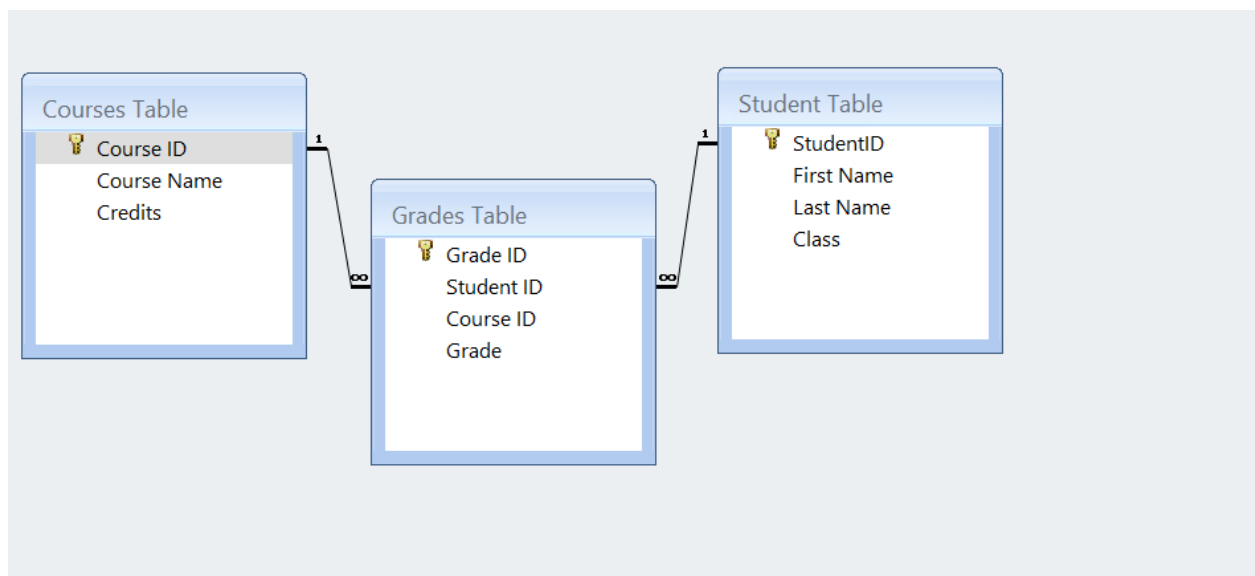
Grade Table

	Grade ID	Student ID	Course ID	Grade	Add New Field		
	1	1	1	A			
	2	2	2	A			
	3	1	3	B			
	4	3	4	C			
*	(New)						


Design View

Field Name	Data Type	
Grade ID	AutoNumber	
Student ID	Number	
Course ID	Number	
Grade	Text	

2. Relationships



3. Forms



Grades Table

Grade ID:

1

Student ID:


1

Course ID:

1

Grade:

A



Grades Table

Grade ID:

2

Student ID:


2

Course ID:

2

Grade:

A



Grades Table

Grade ID:

3

Student ID:

1

Course ID:

3

Grade:

B



Grades Table

Grade ID:	4
Student ID:	3
Course ID:	4
Grade:	C

4. Query

Grade Report				
	First Name	Last Name	Course Name	Grade
	Kamran	Abbas	Database System A	
	Mushaf	Khan	Principle of Computer A	
	Kamran	Abbas	Database System B	
	Qasim	Khan	Operating System C	
*				

5. Report

StudentGradeForm

Friday, October 25, 2024
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Grade ID	Student ID	Course ID	Grade
1	1	1	A
2	2	2	A
3	1	3	B
4	3	4	C
4			