

**Govt College Akora Khattak Nowshera**  
**BSCS - Database Management System**

You are working as a database administrator for a college. Your task is to manage the student records in the college database. The database contains a table named students with the following structure:

```
CREATE TABLE students (  
    ID INT,  
    Name VARCHAR(30),  
    FatherName VARCHAR(30),  
    Phone VARCHAR(11),  
    Department VARCHAR(20),  
    Semester VARCHAR(5),  
    Address TEXT,  
    GuardianPhone VARCHAR(11)  
);
```

The table already contains the following data:

ID	Name	Father Name	Phone	Department	Semester	Address	Guardian Phone
1	Ali	Muhammad Khan	03211234567	Computer Science	IV	Nowshera	NULL
2	Wali	Ayub Khan	03211234874	Computer Science	IV	Nowshera	NULL
3	Faisal	Noor Islam	03212546987	Computer Science	IV	Shaidu	NULL
4	Maaz	Mati Ur Rehamn	03214578213	Computer Science	IV	Swabi	NULL

1. Create a Database:  
Write the SQL command to create a database named college.
2. Create a Table:  
Write the SQL command to create the students table with the structure provided above.
3. Insert Data:  
Insert the following new student record into the students table:
  - ID: 5
  - Name: "Sara"
  - FatherName: "Ahmed Ali"
  - Phone: "03217894561"
  - Department: "Computer Science"
  - Semester: "IV"
  - Address: "Peshawar"

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- GuardianPhone: "03211234567"
- 4. Update Data:  
Update the Address of the student with ID = 4 to "Mardan".
- 5. Add a Column:  
Add a new column named Email with the data type VARCHAR(50) to the students table.
- 6. Delete a Record:  
Delete the student record with ID = 3.
- 7. Select Specific Columns:  
Write a query to display the ID, Name, and Department of all students.
- 8. Filter Data:  
Write a query to display all students who are in the "Computer Science" department.
- 9. Use Wildcards:  
Write a query to display all students whose Address contains the substring "sha".
- 10. Combine Conditions:  
Write a query to display all students who are in the "Computer Science" department and have a Semester value of "IV".
- 11. Count Records:  
Write a query to count the total number of students in the students table.
- 12. Sort Data:  
Write a query to display all students sorted by their Name in ascending order.
- 13. Update with Condition:  
Write a query to update the GuardianPhone to "03211234567" for all students whose Address is "Nowshera".
- 14. Select Distinct Values:  
Write a query to display all distinct Department values from the students table.
- 15. Drop a Column:  
Write a query to drop the GuardianPhone column from the students table.