

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

**Lab Report**

**Course Title: Advance Database management System Lab**

**Course Code: CSE–436**

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| **Submitted By** | **Submitted To** |
| **Name:** Mst. Homai Ara Yesmin  **ID:** 221311139  **Section:** D  **Semester:** 9th  **Batch:** 29th  **Dept. Of CSE**  **Varendra University,**  **Rajshahi** | **Sumaya Hannan Shova**  Lecturer  **Md. Toufikul Islam**  Lecturer  **Dept. Of CSE**  **Varendra University,**  **Rajshahi** |

**Submission date: 04.08.2025**

**Experiment No: 01**

**Experiment Name: Implementing Basic SQL Query and Operations**

**Q1: Create a table named Student with the given structure**

**Code:**

create database studentDb;

use studentDb;

create table student(

student\_id int,

name varchar(20),

department varchar(20),

age int,

gpa float);

**Q2: Insert the 4 records into the Student table**

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| **Code:**  INSERT INTO student(student\_id, name, department, age, gpa) VALUES (1, 'Ayesha', 'CSE', 20, 3.80),  (2, 'Rafi', 'EEE', 21, 3.50),  (3, 'Tanvir', 'CSE', 22, 3.10),  (4, 'Sumaisa', 'BBA', 19, 3.90); | **Output:** |

**Q3: Insert one more student (Nayeem)**

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| **Code:**  INSERT INTO student(student\_id, name, department, age, gpa) VALUES (5, 'Nayeem', 'CSE', 20, 3.60); | **Output:** |

**Q5: Increase GPA by 0.2 for students in "EEE" department**

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| **Code:**  UPDATE student  SET gpa = gpa + 0.2 WHERE department = 'EEE'; | **Output:** |

**Q6: Delete the student whose name is "Tanvir"**

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| **Code:**  DELETE FROM student WHERE name = 'Tanvir'; | **Output:** |

**Q7: Rename the table Student to Student\_Info**

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| **Code:**  EXEC sp\_rename 'Student', 'Student\_Info'; | **Output:** |

**Q8: Rename the column gpa to cgpa in the Student\_Info table**

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| **Code:**  EXEC sp\_rename 'Student\_Info.gpa', 'cgpa', 'COLUMN'; | **Output:** |

**Q9: Add a new column email (type VARCHAR(100)) to Student\_Info**

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| **Code:**  ALTER TABLE Student\_Info ADD email VARCHAR(100); | **Output:** |

**Q10: Insert a new student without GPA and then update the GPA later**

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| **Code:**  INSERT INTO Student\_Info (student\_id, name, department, age)  VALUES (6, 'Shrabony', 'CSE', 24)  UPDATE Student\_Info  SET cgpa = 3.25 WHERE name = 'Shrabony'; | **Output:** |