Bangladesh University of Business and Technology
Department of Computer Science and Engineering

CSE 232: Database Systems Lab

Lab 01 Tasks - Introduction

Commands

The CREATE DATABASE statement

Structure:

```
CREATE DATABASE database_name;
```

Example:

```
CREATE DATABASE bubt_cse208;
```

The CREATE TABLE statement

Structure:

```
CREATE TABLE table_name
  (
    column_1 data_type,
    column_2 data_type,
    .
    .
  );
```

Example:

```
CREATE TABLE student
  (
    ID INT,
    NAME VARCHAR(30),
    SEMESTER VARCHAR(5)
  );
```

You can explore some more data types here.

The SELECT statement

Structure 1:

```
SELECT * FROM table_name;
```

Example:

```
SELECT * FROM student;
```

Structure 2:

```
SELECT col1, col2 FROM table_name;
```

Example:

```
SELECT NAME, SEMESTER FROM student;
```

The INSERT INTO statement

Structure 1:

```
INSERT INTO table_name
VALUES (value1, value2, ...);
```

Example:

```
INSERT INTO student
VALUES (41201, 'Tasmia', '2nd');
```

Structure 2:

```
INSERT INTO table_name (col1, col2, ...)
VALUES (value1, value2, ...);
```

Example:

```
INSERT INTO student (NAME)
VALUES ('Saad');
```

The ALTER TABLE - ADD Column statement

Structure:

```
ALTER TABLE table_name
ADD column_name data_type;
```

Example:

```
ALTER TABLE student
ADD intake VARCHAR(5);
```

The ALTER TABLE - ALTER/MODIFY Column statement

Structure:

```
ALTER TABLE table_name
ALTER COLUMN column_name data_type;
```

Example:

```
ALTER TABLE student
ALTER COLUMN intake INT;
```

Note: For some versions of MySQL, you would need to use MODIFY instead.
Structure:

```
ALTER TABLE table_name
MODIFY COLUMN column_name data_type;
```

Example:

```
ALTER TABLE student
MODIFY COLUMN intake INT;
```

The ALTER TABLE - DROP Column statement

Structure:

```
ALTER TABLE table_name
DROP column_name;
```

Example:

```
ALTER TABLE student
DROP intake;
```

The DROP TABLE statement

Structure:

```
DROP TABLE table_name;
```

Example:

```
DROP TABLE student;
```

Tasks

1. Create a database named cse208_sec9
2. Create a table named employee with columns - id, name, salary, hometown
3. Enter 5 values into the employee table
4. Display the entire employee table
5. Only display the name of the employees
6. Only display the id and salary of the employees
7. Create a table named dept with columns - dept_name, building, room, budget
8. Enter 5 values into the dept table
9. Display the entire dept table
10. Only display the dept_name, building, budget of the departments
11. Add a new column “FacultyCount” with datatype VARCHAR to the department table
12. Change the datatype of “FacultyCount” to INT
13. Insert some values for “FacultyCount” in department