

Topgyal Gurung

HW: due september 28, Friday

**Enumerate all the concepts you have learned in this class, so far: An example would be entity.**

Data model, schemas and instances

History

Three schema architecture and data independence

Categories of Data models

Database Management Software (DBMS):

Piece of software for managing databases and providing access to them.

Structured data vs Unstructured data:

1. Structured data: machine generated. E.g. relational database
2. Unstructured data

DBMS Language

1. Data Definition Language(DDL)
2. Data Manipulation Language(DML)

Relational model concepts:

Organizes data into one or more tables(Relations) of columns and rows with unique key.

Rows are also called records or tuples

Columns are attributes

Database schemas

Entity- Relationship (ER) model Data Modeling

Entity types, attributes and keys

Relationship types

ER diagrams and naming conventions

Normalization

**Enumerate all the operations you have learned in this class, so far: An example would be Create a table**

**MariaDB:**

**To use type in command terminal:**

```
$mysql -u root
```

```
$show databases
```

Then use old or create new one:

To create new one: \$create database name;

Or to use old: \$use dname;

**CRUD-** Create Read Update and Delete

CREATE TABLE

```
CREATE TABLE student(id int, name varchar(32), gender char(1), email  
varchar(64));
```

SELECT (read)

```
SELECT * from student;
```

```
SELECT email, name from student;
```

Update

```
INSERT INTO student (id, name) VALUES (1, "topgyal");
```

```
UPDATE student SET name="John";
```

```
Student VALUES(1,'topgyal', 'M', 'topgyaltsering3@gmail.com')
```

Delete

```
DELETE FROM student WHERE name= "top";
```