

# CS 306

## Recitation 1



# Today's Plan

- Notes about MySQL installation
- Learning basic SQL commands
- Creating a small database

# Github Repository for Recitations

We are planning to use a github repository for this semester to share the datasets and example queries that will be used in recitations for demonstrating the practices for creating and using a database.

It is highly recommended to follow the course material in the recitations for accelerating your learning process and reducing your workload for projects.

The repository will contain the materials for recitations.

The repository link:

<https://github.com/hasan-ert/cs306-202401-recit>

# Installation Links

You need to install MySQL Server & Workbench into your computer

Check out MySQL website or these videos regarding to your operating system

- <https://dev.mysql.com/downloads/>

For Windows:

- <https://www.youtube.com/watch?v=u96rVINbAUI&t=9s>

For Mac:

- <https://www.youtube.com/watch?v=YaquZR7126M>

# SQL Create Table Commands

```
Create Table continents(  
    continent_code Varchar(5)  
Not Null,  
    continent_name  
Varchar(50),  
    primary key  
(continent_code)  
);
```

```
Create Table countries(  
    iso_code Varchar(5) Not Null,  
    countries_name Varchar(50),  
    population INT,  
    primary key (iso_code)  
);
```

```
Create table continents_countries(  
    continent_code Varchar(5) NOT NULL,  
    iso_code Varchar(5),  
    Primary key (iso_code),  
    Foreign key (continent_code) References  
continent(continent_code) On Delete Cascade,  
    Foreign key (iso_code) References  
countries(iso_code) On Delete Cascade  
);
```

# Manually Inserting Data

Some example insertion queries are as follows:

- **Insert Into countries Values (“TUR”, “Turkey”, 84780000)**
  - Inserts an instance for “Turkey” in “countries” table
- **Insert Into continent Values (“EU”, “Europe”)**
  - Inserts “Europe” into continent table
- **Insert Into continent\_countries Values (“EU”, “TUR”)**
  - Inserts an instance with “EU” as continent\_code and “TUR” as iso\_code into countries\_countries table

# Delete Statements

Delete From countries Where iso\_code = “TUR”

- Deletes the instances from countries table where iso\_code is equal to “TUR”

Delete From countries\_countries Where continent\_code = “EU” AND iso\_code = “TUR”

- Deletes the instances from countries\_countries table where continent\_code is equal to “EU” AND iso\_code is equal to “TUR”

# DROP and ALTER Statements

DROP TABLE countries

- Deletes the countries table from database

ALTER TABLE countries

Rename Column country\_name to name

Add Column population\_density DECIMAL

- Alters the countries table by
  - Renaming countries\_name column to name
  - Adding a new column named population\_density with type Decimal



# Questions

You may ask any question regarding to today's recitation or any subject related to projects

# Thank You for Your Attendance!

See you all next week