



NATIONAL UNIVERSITY OF MODERN LANGUAGES

Data Base Management Lab Report - 2

NAME: Abdul Rafay

ROLL NO: FL23791

PROGRAM: BSSE (4th Semester)

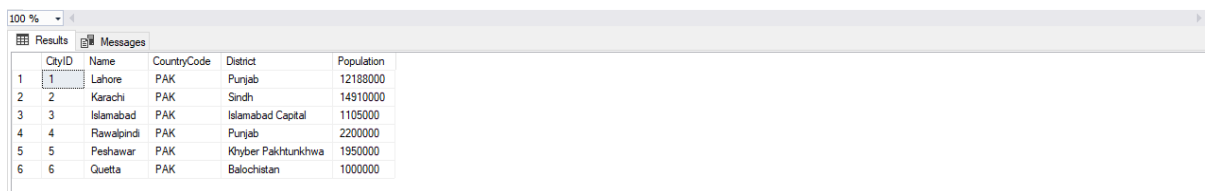
COURSE: DATA BASE MANAGEMENT

SUBMITTED TO: Sir M Waqar

DATE: 5 May 2025

DAY: Monday

Q1. Write an SQL query to display all records from city table



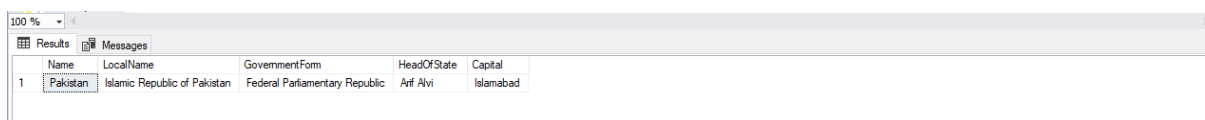
A screenshot of a SQL query result window showing a table with 6 rows and 5 columns: CityID, Name, CountryCode, District, and Population. The data is as follows:

| CityID | Name | CountryCode | District | Population |
|--------|------------|-------------|--------------------|------------|
| 1 | Lahore | PAK | Punjab | 12188000 |
| 2 | Karachi | PAK | Sindh | 14910000 |
| 3 | Islamabad | PAK | Islamabad Capital | 1105000 |
| 4 | Rawalpindi | PAK | Punjab | 2200000 |
| 5 | Peshawar | PAK | Khyber Pakhtunkhwa | 1950000 |
| 6 | Quetta | PAK | Balochistan | 1000000 |

Q2. Write an SQL Query to display the following records. Give reasoning also that

which table would be used get the following records

- Name
- local name
- government form
- Head of state
- Capital



A screenshot of a SQL query result window showing a table with 1 row and 5 columns: Name, LocalName, GovernmentForm, HeadOfState, and Capital. The data is as follows:

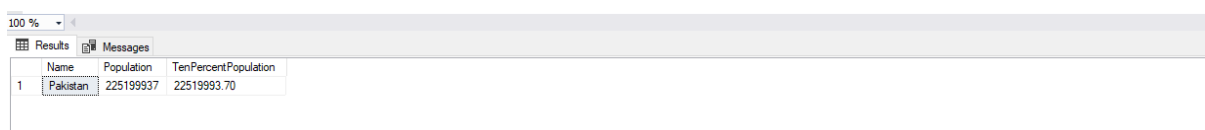
| Name | LocalName | GovernmentForm | HeadOfState | Capital |
|----------|------------------------------|--------------------------------|-------------|-----------|
| Pakistan | Islamic Republic of Pakistan | Federal Parliamentary Republic | Arif Alvi | Islamabad |

Q3. Describe the structure of country language table and city table and also explain in your words about the output result

```
CREATE TABLE countrylanguage (  
    CountryCode CHAR(3),  
    Language VARCHAR(30),  
    IsOfficial CHAR(1),  
    Percentage FLOAT,  
    FOREIGN KEY (CountryCode)  
REFERENCES country(CountryCode)  
);
```

```
CREATE TABLE city (  
    CityID INT PRIMARY KEY,  
    Name VARCHAR(50),  
    CountryCode CHAR(3),  
    District VARCHAR(50),  
    Population INT  
);
```

Q4. Consider country table and use arithmetic operators within SQL query to calculate 10 % on population column



A screenshot of a SQL query result window showing a table with 1 row and 3 columns: Name, Population, and TenPercentPopulation. The data is as follows:

| Name | Population | TenPercentPopulation |
|----------|------------|----------------------|
| Pakistan | 225199937 | 22519993.70 |

| 100 % | | | | | | |
|-------|--------|------------------|-------------|--------------------|------------|--|
| | | Results Messages | | | | |
| | CityID | Name | CountryCode | District | Population | |
| 1 | 1 | Lahore | PAK | Punjab | 12188000 | |
| 2 | 2 | Karachi | PAK | Sindh | 14910000 | |
| 3 | 3 | Islamabad | PAK | Islamabad Capital | 1105000 | |
| 4 | 4 | Rawalpindi | PAK | Punjab | 2200000 | |
| 5 | 5 | Peshawar | PAK | Khyber Pakhtunkhwa | 1950000 | |
| 6 | 6 | Quetta | PAK | Balochistan | 1000000 | |

| | CountryCode | Name | LocalName | GovernmentForm | HeadOfState | Capital | Population |
|---|-------------|----------|------------------------------|--------------------------------|-------------|-----------|------------|
| 1 | PAK | Pakistan | Islamic Republic of Pakistan | Federal Parliamentary Republic | Arif Alvi | Islamabad | 225199937 |

| | CountryCode | Language | IsOfficial | Percentage |
|---|-------------|----------|------------|------------|
| 1 | PAK | Urdu | T | 75 |
| 2 | PAK | English | T | 10 |
| 3 | PAK | Punjabi | F | 45 |
| 4 | PAK | Pashto | F | 30 |

Q5. Consider country language table. Write SQL query to concatenate columns i.e. Country code and language .Also use column alias to rename the concatenated column as country details column

100 %

Results

Messages

| | CountryDetails |
|---|----------------|
| 1 | PAK - Urdu |
| 2 | PAK - English |
| 3 | PAK - Punjabi |
| 4 | PAK - Pashto |