JOB PORTAL DATABASE PROJECT:

KEY MILESTONE 3:

GROUP MEMBERS:

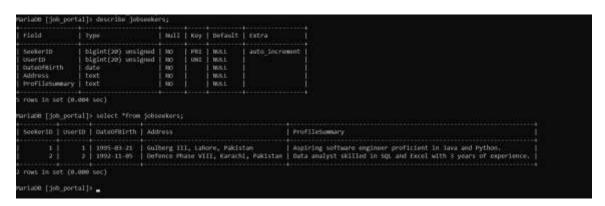|	
M Afnan Khan	22pwcse2155
Mohsin Sajjad	22pwcse2149
M Hassan	22pwcse2105

TABLES AND METADATA:

```
MariaDB [(none)]> use job_portal;
Database changed
MariaDB [job_portal]> show tables;
+---------------------+
| Tables_in_job_portal |
+---------------------+
| applications        |
| employers           |
| jobs                |
| jobseekers          |
| resumes             |
| users               |
+---------------------+
6 rows in set (0.001 sec)

MariaDB [job_portal]>
```

USERS

```
MariaDB [job_portal]> describe users;
+----------+---------------------+------+-----+---------+----------------+
| Field    | Type                | Null | Key | Default | Extra          |
+----------+---------------------+------+-----+---------+----------------+
| UserID   | bigint(20) unsigned | NO   | PRI | NULL    | auto_increment |
| Name     | varchar(100)        | NO   |     | NULL    |                |
| Email    | varchar(255)        | NO   | UNI | NULL    |                |
| Password | varchar(255)        | NO   |     | NULL    |                |
| UserType | varchar(10)         | NO   |     | NULL    |                |
+----------+---------------------+------+-----+---------+----------------+
5 rows in set (0.010 sec)

MariaDB [job_portal]> select *from users;
+--------+-----------------------+-----------------------+--------------+-----------+
| UserID | Name                  | Email                 | Password     | UserType  |
+--------+-----------------------+-----------------------+--------------+-----------+
|      1 | Ali Khan              | ali.khan@domain.pk    | hashed_pwd1  | JobSeeker |
|      2 | Fatima Ali            | fatima.ali@domain.pk  | hashed_pwd2  | JobSeeker |
|      3 | Tech Solutions HR     | hr@techsolutions.pk   | hashed_pwd3  | Employer  |
|      4 | Lahore IT Services HR | hr@lahoreit.pk        | hashed_pwd4  | Employer  |
+--------+-----------------------+-----------------------+--------------+-----------+
4 rows in set (0.000 sec)

MariaDB [job_portal]> _
```

Jobseeker

```
MariaDB [job_portal]> describe jobseekers;
+----------------+---------------------+------+-----+---------+----------------+
| Field          | Type                | Null | Key | Default | extra          |
+----------------+---------------------+------+-----+---------+----------------+
| SeekerID       | bigint(20) unsigned | NO   | PRI | NULL    | auto_increment |
| UserID         | bigint(20) unsigned | NO   | UNI | NULL    |                |
| DateOfBirth    | date                | NO   |     | NULL    |                |
| Address        | text                | NO   |     | NULL    |                |
| ProfileSummary | text                | NO   |     | NULL    |                |
+----------------+---------------------+------+-----+---------+----------------+
5 rows in set (0.004 sec)

MariaDB [job_portal]> select *from jobseekers;
+----------+--------+------------+--------------------------------+------------------------------------------------------------+
| SeekerID | UserID | DateOfBirth| Address                        | ProfileSummary                                             |
+----------+--------+------------+--------------------------------+------------------------------------------------------------+
|        1 |      1 | 1995-03-21 | Gulberg III, Lahore, Pakistan  | Aspiring software engineer proficient in Java and Python.  |
|        2 |      2 | 1992-11-05 | Defence Phase VIII, Karachi, Pakistan | Data analyst skilled in SQL and Excel with 3 years of experience. |
+----------+--------+------------+--------------------------------+------------------------------------------------------------+
2 rows in set (0.000 sec)

MariaDB [job_portal]> _
```

APPLICATIONS

```
MariaDB [job_portal]> select *from applications;
+---------------+-------+----------+----------+-------------+---------+
| ApplicationID | JobID | SeekerID | ResumeID | AppliedDate | Status  |
+---------------+-------+----------+----------+-------------+---------+
|             7 |     1 |        1 |        1 | 2025-06-02  | Pending |
|             8 |     2 |        1 |        1 | 2025-06-02  | Pending |
|             9 |     3 |        2 |        2 | 2025-06-02  | Pending |
+---------------+-------+----------+----------+-------------+---------+
3 rows in set (0.000 sec)

MariaDB [job_portal]> describe applications;
+---------------+---------------------+------+-----+-----------+----------------+
| Field         | Type                | Null | Key | Default   | Extra          |
+---------------+---------------------+------+-----+-----------+----------------+
| ApplicationID | bigint(20) unsigned | NO   | PRI | NULL      | auto_increment |
| JobID         | bigint(20) unsigned | NO   | MUL | NULL      |                |
| SeekerID      | bigint(20) unsigned | NO   | MUL | NULL      |                |
| ResumeID      | bigint(20) unsigned | NO   | MUL | NULL      |                |
| AppliedDate   | date                | NO   |     | curdate() |                |
| Status        | varchar(10)         | NO   |     | NULL      |                |
+---------------+---------------------+------+-----+-----------+----------------+
6 rows in set (0.010 sec)

MariaDB [job_portal]>
```

EMPLOYERS

```
MariaDB [job_portal]> describe employers;
+--------------------+---------------------+------+-----+---------+----------------+
| Field              | Type                | Null | Key | Default | Extra          |
+--------------------+---------------------+------+-----+---------+----------------+
| EmployerID         | bigint(20) unsigned | NO   | PRI | NULL    | auto_increment |
| UserID             | bigint(20) unsigned | NO   | UNI | NULL    |                |
| CompanyName        | varchar(255)        | NO   |     | NULL    |                |
| CompanyDescription | text                | YES  |     | NULL    |                |
| CompanyWebsite     | varchar(255)        | YES  |     | NULL    |                |
| VerifiedStatus     | tinyint(1)          | NO   |     | 0       |                |
+--------------------+---------------------+------+-----+---------+----------------+
6 rows in set (0.005 sec)

MariaDB [job_portal]> select *from employers;
+------------+--------+--------------------+---------------------------------------------+----------------------------+----------------+
| EmployerID | UserID | CompanyName        | CompanyDescription                          | CompanyWebsite             | VerifiedStatus |
+------------+--------+--------------------+---------------------------------------------+----------------------------+----------------+
|          1 |      3 | Tech Solutions PK  | Leading IT solutions provider in Pakistan.  | https://www.techsolutions.pk |              1 |
|          2 |      4 | Lahore IT Services | Offering web development and support services. | https://www.lahoreit.pk   |              1 |
+------------+--------+--------------------+---------------------------------------------+----------------------------+----------------+
2 rows in set (0.000 sec)

MariaDB [job_portal]>
```

JOBS:

```
MariaDB [job_portal]> describe jobs;
+-------------+---------------------+------+-----+-----------+----------------+
| Field       | Type                | Null | Key | Default   | Extra          |
+-------------+---------------------+------+-----+-----------+----------------+
| JobID       | bigint(20) unsigned | NO   | PRI | NULL      | auto_increment |
| EmployerID  | bigint(20) unsigned | NO   | MUL | NULL      |                |
| Title       | varchar(255)        | NO   |     | NULL      |                |
| Description | text                | NO   |     | NULL      |                |
| Requirements| text                | NO   |     | NULL      |                |
| Location    | varchar(255)        | NO   |     | NULL      |                |
| SalaryRange | varchar(50)         | YES  |     | NULL      |                |
| PostedDate  | date                | NO   |     | curdate() |                |
+-------------+---------------------+------+-----+-----------+----------------+
8 rows in set (0.005 sec)

MariaDB [job_portal]> select *from jobs;
+-------+------------+------------------+-------------------------------------------------------------------------------+-------------------------------------------------------+
| JobID | EmployerID | Title            | Description                                                                   | Requirements                                          |
|       |            | Location         | SalaryRange      | PostedDate                                              |                                                       |
+-------+------------+------------------+-------------------------------------------------------------------------------+-------------------------------------------------------+
|     1 |          1 | Software Developer | Develop and maintain web applications for domestic and international clients. | BSc in Computer Science; 1-2 years of experience in PHP, Ja
vascript, and Laravel. | Lahore, Pakistan  | PKR 60,000-80,000 | 2025-06-02 |
|     2 |          1 | QA Engineer      | Test and ensure the quality of software products; write test plans and bug reports. | 2 years in manual and automated testing; familiarity with S
elenium & JMeter.  | Karachi, Pakistan | PKR 50,000-70,000 | 2025-06-02 |
|     3 |          2 | Data Analyst     | Analyze business data, generate dashboards, and present insights to stakeholders. | Bachelor's in Statistics or related field; proficient in SQ
L, Excel, and Power BI. | Karachi, Pakistan | PKR 70,000-90,000 | 2025-06-02 |
+-------+------------+------------------+-------------------------------------------------------------------------------+-------------------------------------------------------+
3 rows in set (0.000 sec)

MariaDB [job_portal]>
```

RESUMES

```
MariaDB [job_portal]> describe resumes;
+-------------+---------------------+------+-----+-----------+----------------+
| Field       | Type                | Null | Key | Default   | Extra          |
+-------------+---------------------+------+-----+-----------+----------------+
| ResumeID    | bigint(20) unsigned | NO   | PRI | NULL      | auto_increment |
| SeekerID    | bigint(20) unsigned | NO   | MUL | NULL      |                |
| FilePath    | varchar(500)        | NO   |     | NULL      |                |
| UploadDate  | date                | NO   |     | curdate() |                |
| LastUpdated | date                | NO   |     | curdate() |                |
+-------------+---------------------+------+-----+-----------+----------------+
5 rows in set (0.005 sec)

MariaDB [job_portal]> select *from resumes;
+----------+----------+-----------------------------+------------+-------------+
| ResumeID | SeekerID | FilePath                    | UploadDate | LastUpdated |
+----------+----------+-----------------------------+------------+-------------+
|        1 |        1 | /resumes/ali_khan_cv.pdf    | 2025-06-02 | 2025-06-02  |
|        2 |        2 | /resumes/fatima_ali_resume.pdf | 2025-06-02 | 2025-06-02  |
+----------+----------+-----------------------------+------------+-------------+
2 rows in set (0.000 sec)

MariaDB [job_portal]>
```

SQL Queries

-- List all jobs posted by a specific employer

> *SELECT j.JobID, j.JobTitle, j.Location, j.PostedDate FROM Jobs j JOIN Employers e ON j.EmployerID = e.EmployerID WHERE e.CompanyName = 'XYZ Technologies';*

-- List all applications for a specific jobseeker

> *SELECT a.ApplicationID, j.JobTitle, a.ApplicationDate, a.Status FROM Applications a JOIN Jobs j ON a.JobID = j.JobID WHERE a.JobseekerID = 1;*

-- Retrieve jobseeker details along with their resume

> *SELECT js.FirstName, js.LastName, r.ResumeFilePath FROM Jobseekers js JOIN Resumes r ON js.ResumeID = r.ResumeID WHERE js.JobseekerID = 1;*

-- Count number of applications per job

> *SELECT j.JobTitle, COUNT(a.ApplicationID) AS ApplicationCount FROM Jobs j LEFT JOIN Applications a ON j.JobID = a.JobID GROUP BY j.JobID;*

-- List employers and the number of jobs they have posted

```sql
SELECT e.CompanyName, COUNT(j.JobID) AS JobCount FROM
Employers e LEFT JOIN Jobs j ON e.EmployerID = j.EmployerID
GROUP BY e.EmployerID;
```