

TASK 3:-

- **CREATE THE TABLE STUDENT:-**

Name- student.sql

```
CREATE TABLE student (  
    student_id INT AUTO_INCREMENT PRIMARY KEY,  
    first_name VARCHAR(100) NOT NULL,  
    last_name VARCHAR(100) NOT NULL,  
    date_of_birth DATE,  
    email VARCHAR(100) UNIQUE  
);
```

- **INSERT DATA INTO TABLE STUDENT:-**

```
INSERT INTO student (first_name, last_name, date_of_birth, email)  
VALUES ('Bhavesh', 'Borekar', '2006-10-27', 'bhavesh@gmail.com'),  
    ('Sushil', 'Pandey', '2005-08-22', 'sushil@gmail.com'),  
    ('Payal', 'Khade', '2005-02-10', 'payal@gmail.com');
```

- **SHOW THE TABLE STUDENT**

```
SELECT * FROM student;
```

Student				
student_id	first_name	last_name	date_of_birth	email
	Bhavesh	Borekar	2006-10-27	bhavesh@gmail.com
	Sushil	Pandey	2005-08-22	sushil@gmail.com
	Payal	Khade	2005-02-10	payal@gmail.com

- **CREATE TABLE IN POSTRESQL:-**

```
CREATE TABLE student (  
    student_id SERIAL PRIMARY KEY,  
    first_name VARCHAR(100) NOT NULL,  
    last_name VARCHAR(100) NOT NULL,  
    date_of_birth DATE,  
    email VARCHAR(100) UNIQUE
```

);

- **INSERT DATA INTO TABLE STUDENT:-**

```
INSERT INTO student (first_name, last_name, date_of_birth, email)
VALUES ('Bhaves', 'Borekar', '2006-10-27', 'bhaves@gmail.com'),
      ('Sushil', 'Pandey', '2005-08-22', 'sushil@gmail.com'),
      ('Payal', 'Khade', '2005-02-10', 'payal@gmail.com');
```

- **SHOW THE TABLE STUDENT**

```
SELECT * FROM student;
```

Student				
student_id	first_name	last_name	date_of_birth	email
	Bhaves	Borekar	2006-10-27	bhaves@gmail.com
	Sushil	Pandey	2005-08-22	sushil@gmail.com
	Payal	Khade	2005-02-10	payal@gmail.com

- **Exploring the data into CSV file**

```
SELECT * FROM student
INTO OUTFILE 'C:\Users\User\Desktop/student.csv'
FIELDS TERMINATED BY ','
ENCLOSED BY '"'
LINES TERMINATED BY '\n';
```

- **Importing data from postgresql:**

```
COPY student(student_id, first_name, last_name, date_of_birth, email)
FROM 'C:\Users\User\Desktop/student.csv'
DELIMITER ','
CSV HEADER;
```

- **Verify Data in MySQL**

```
SELECT * FROM student;
```

Student				
student_id	first_name	last_name	date_of_birth	email
	Bhavesb	Borekar	2006-10-27	bhavesb@gmail.com
	Sushil	Pandey	2005-08-22	sushil@gmail.com
	Payal	Khade	2005-02-10	payal@gmail.com

- **Verify Data in PostgreSQL:**

```
SELECT * FROM student;
```

Student				
student_id	first_name	last_name	date_of_birth	email
	Bhavesb	Borekar	2006-10-27	bhavesb@gmail.com
	Sushil	Pandey	2005-08-22	sushil@gmail.com
	Payal	Khade	2005-02-10	payal@gmail.com

The data is found same so the process of migration is successfully completed.

Data Migration Using pgLoader

1. **Export Data from MySQL**

```
mysqldump -u mysql_user -p mysql_db student > student_data.sql
```

2. **Import Data into PostgreSQL:**

```
pgloader mysql://mysql_user:mysql_pass@localhost/mysql_db
postgres://postgres_user:postgres_pass@localhost/postgres_db
```

Convert Stored Procedures and Functions

1. MySQL Stored Function:

```
DELIMITER //  
  
CREATE FUNCTION get_user_by_dob(date_of_birth DATE) RETURNS VARCHAR(100)  
  
BEGIN  
  
    DECLARE user_name VARCHAR(100);  
  
    SELECT first_name INTO user_name FROM student WHERE date_of_birth = date_of_birth;  
  
    RETURN user_name;  
  
END //  
  
DELIMITER ;
```

2. PostgreSQL Equivalent:

```
CREATE FUNCTION get_user_by_dob(date_of_birth DATE) RETURNS VARCHAR(100) AS $$  
  
BEGIN  
  
    RETURN (SELECT first_name FROM student WHERE date_of_birth = date_of_birth);  
  
END;  
  
$$ LANGUAGE plpgsql;
```

➤ *mysql:-*

```
SELECT first_name FROM student  
  
WHERE date_of_birth = '2006-10-27';
```

first_name
Bhaves

➤ *In PostgreSQL:*

```
SELECT first_name FROM student  
  
WHERE date_of_birth = '2006-10-27';
```

first_name
Bhaves

➤ ***In MySQL:***

SELECT COUNT(*) FROM student;

COUNT(*)
3

➤ ***In PostgreSQL:***

SELECT COUNT(*) FROM student;

COUNT(*)
3

➤ **Final Verification**

SELECT * FROM student;

student_id	first_name	last_name	date_of_birth	email
	Bhavesh	Borekar	2006-10-27	bhavesh@gmail.com
	Sushil	Pandey	2005-08-22	sushil@gmail.com
	Payal	Khade	2005-02-10	payal@gmail.com