Database Backup and Recovery – Task 4 (CodTech Internship)

# 1. Objective:

To demonstrate how to back up a database and restore it in case of a failure using appropriate backup and recovery tools.

# 2. Tools Used:

- MySQL (via XAMPP or command-line)  
- PostgreSQL (via pgAdmin or command-line)  
- Terminal/Command Prompt  
- SQL dump and restore commands

# 3. Backup and Recovery Process:

The steps below outline how to back up and restore a database in both MySQL and PostgreSQL.

## 3.1 MySQL Backup and Recovery:

• Backup Command:

mysqldump -u root -p your\_database\_name > backup.sql

• Restore Command:

mysql -u root -p your\_database\_name < backup.sql

## 3.2 PostgreSQL Backup and Recovery:

• Backup Command:

pg\_dump -U postgres -F c -b -v -f backup.pgsql your\_database\_name

• Restore Command:

pg\_restore -U postgres -d your\_database\_name -v backup.pgsql

# 4. Verification:

After performing both backup and restore operations, queries were run to verify data consistency. The number of records and data integrity were confirmed by comparing source and restored databases.

# 5. Challenges Faced:

- Permission issues while running backup/restore commands on PostgreSQL.  
- Resolved by using elevated privileges and correct file paths.

# 6. Conclusion:

The backup and recovery process for both MySQL and PostgreSQL was successfully completed. The data was accurately preserved and recovered, validating the reliability of the backup procedures.