

Week2Lab_Backup_and_Restore_PostgreSQL

Exercise 1: Restore a Full Database from a Backup

Consider to download the following database, is a full database backup of a month of flight data in Russia.

```
wget https://cf-courses-data.s3.us.cloud-object-storage.appdomain.cloud/example-guided-project/flights_RUSSIA_small.sql
```

In the PostgreSQL CLI, type in the command `\i <file_name>`.

In our case, the filename will be the name of the file you downloaded, `flights_RUSSIA_small.sql`.

This will restore the data into a new database called `demo`.

```
\i flights_RUSSIA_small.sql
```

After the restoration completes, one way you can check that the database has been restored is with the following command, which lists all the tables in the current database schema.

```
\dt
```

Exercise 2: Modify the Database and Perform a Full Backup

One of the tables in the database schema is `aircrafts_data`. You can take a look at the contents of that table by executing the following command in the PostgreSQL CLI:

```
SELECT * FROM aircrafts_data;
```

Suppose a new model of aircraft is being added to the fleet, and you, as the database administrator, are responsible for updating the database to reflect this addition. The aircraft they wish to add is the Airbus A380, which has a range of 15,700 km and aircraft code "380". You can do this by executing the following command in the PostgreSQL CLI:

```
INSERT INTO aircrafts_data(aircraft_code, model, range) VALUES (380, '{"en": "Airbus A380-800"}', 15700);
```

Backup your Database using pgAdmin

1. Right click on `database_name` and select `backup` option
2. add a name and a backup format (tar)

Exercise 3: Restore a Full Backup after Accidental Deletion

In this exercise, suppose you find yourself in a situation where you accidentally dropped the entire database. Fortunately, you made a full backup of the database in the previous exercise, which you will

use to restore the database.

1. First, you will need an empty database in which to restore the demo database. Create a new database in pgAdmin by right clicking "Databases" then clicking "Create" > "Database...".
2. Name the database into which you will restore the original demo database (For example, restored_demo), then click the "Save" button on the bottom right.
3. right click on `restored_demo` and click on `restore`
4. select the backup file do restore the db

```
\connect restored_demo
```

```
SELECT pg_catalog.set_config('search_path', 'bookings', false);
```