

## Exercises: Creating Tables

Create a table in SQL and fill it with penguin data.



### 1. Connect to Postgres

Connect to your Postgres database via the command line:

```
psql
```

If you specified a username (-U) or database name (-d) before, do it again.

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### 2. Create a table

Copy the SQL command for loading the small penguin file into `psql`:

```
CREATE TABLE IF NOT EXISTS penguins (  
  
    id SERIAL PRIMARY KEY,  
    species TEXT,  
    gender VARCHAR(10),  
    bill_length_mm NUMERIC NOT NULL,  
    body_mass_g INT CHECK (body_mass >= 0 AND body_mass < 10000)
```

```
);
```

You should see the response:

```
CREATE TABLE
```

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### 3. Load data

Copy the smaller CSV file `penguins.csv` to the newly created table.

Use the command:

```
\copy penguins FROM '<path>/penguins.csv' DELIMITER ',' CSV HEADER;
```

Replace `<path>` by the **absolute path** to your `penguins.csv` using **forward slashes** (/).

You should see the response:

```
COPY 50
```

This tells you that 50 rows have been copied into the table.

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### 4. Inspect the data

Make sure that the data is in your table by typing in the query:

```
SELECT * FROM penguins;
```

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### 5. Another table

Now load the bigger table `penguins_big.sql`. For this one, you need to create a second table. Follow these steps:

1. open the CSV file in a text editor or Excel
2. note what columns are there and what their respective data types are
3. write a new `CREATE TABLE` statement
4. select a new name for the table (`penguins` is already used)
5. add an entry for each column in the same order as they are in the CSV
6. execute the `CREATE TABLE` statement in `psql`
7. use `\copy` to load the data