

ITERATION 1 DATABASE SET UP INSTRUCTIONS

1. Create instance of DB2 resource
2. Once loaded, open resource, create new service credentials
3. Make note of your generated username in the service credentials
4. Open console, navigate to the schema matching your credential username (it should be empty)
5. In the drop down menu in top left, navigate to RUN SQL
6. Run following commands in a new file

```
CREATE TABLE ingredients (  
    ingredient_id INT NOT NULL GENERATED ALWAYS AS IDENTITY,  
    ingredient_name VARCHAR(150) NOT NULL,  
    PRIMARY KEY(ingredient_id)  
);
```

```
CREATE TABLE recipes (  
    recipe_id INT NOT NULL,  
    recipe_name VARCHAR(150) NOT NULL,  
    course VARCHAR(50) NOT NULL,  
    cuisine VARCHAR(100) NOT NULL,  
    preparation VARCHAR(50) NOT NULL,  
    cooking_length VARCHAR(50) NOT NULL,  
    spice_level VARCHAR(20) NOT NULL,  
    dairy BOOLEAN NOT NULL,  
    gluten BOOLEAN NOT NULL,  
    diet VARCHAR(50) NOT NULL,  
    link VARCHAR(200) NOT NULL,  
    PRIMARY KEY(recipe_id)  
);
```

```
CREATE TABLE recipes_ingredients (  
    recipe_id INT NOT NULL,  
    ingredient_id INT NOT NULL,  
    CONSTRAINT fk_recipe  
        FOREIGN KEY (recipe_id)  
        REFERENCES recipes(recipe_id) ON DELETE CASCADE,  
    CONSTRAINT fk_ingredient  
        FOREIGN KEY (ingredient_id)  
        REFERENCES ingredients(ingredient_id) ON DELETE CASCADE  
) ORGANIZE BY ROW;
```

7. If it runs successfully, check tables have been made by navigating to explore -> tables in the menu, go to your username schema and check it has the 3 tables generated
8. Download 3 csv files
9. Navigate to LOAD->Load Data in menu
10. Upload files Ingredients, Recipes then Recipes_Ingredients in that order
11. The first 2 should upload fine without errors, the Recipes_Ingredients file may throw a warning.
12. If the warning occurs, go back to the RUN SQL screen and run the following SQL:

```
set integrity for recipes_ingredients immediate checked
```
13. If that runs fine, check it is working by running this:

```
select count(*) from recipes_ingredients;
```

14. Check that runs ok, click the arrow in the results tab and it should have returned 23

The screenshot shows a database query interface. At the top, a query is entered: `select count(*) from recipes_ingredients;` with a green checkmark icon to its left and a 'Run time: 0.009 s' indicator to its right. Below the query, there is a 'Result set 1' label. To the right of this label is a search bar with the word 'Search' and a magnifying glass icon. Further right are two icons: an upward-pointing arrow and a right-pointing arrow, the latter of which is highlighted with a red square. Below these elements is a table with two rows. The first row contains the number '1', and the second row contains the number '23'.

1
23

At this stage the database should be set up and working as intended.