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App Fullstack Developer Program
Integrate MySQL to an Express App

Instruction:

For submission,

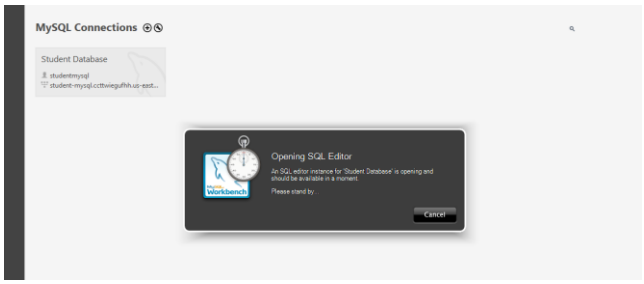
1. Upload your source code in a zip file to Talentlabs Classroom. Please don't include the node_modules folder.
2. Upload this document as a PDF file as well.

Prepare: Setting up MySQL WorkBench

Instruction

1. Download from here https://www.mysql.com/products/workbench/
2. Install the application.
3. Create a new Database connection by clicking the "+" button:

4. Fill in the connection details:
   Connection Name: Any name is ok here
   Hostname: student-mysql.ccttwiegufhh.us-east-2.rds.amazonaws.com
   Username: studentmysql
   Password: studentmysql
5. Click "Test connection" and it should work.
6. Click "OK" to store the connection.
7. Double click the connection to connect:



Prepare: Express Application Generator

Steps:

1. Execute the command: **npx express-generator --ejs express-lab-11**
2. Change directory into that new folder: **cd express-lab-11**
3. Install all npm packages: **npm install**
4. Start the server

- Windows PowerShell:

$env:DEBUG='express-lab-11:*'; npm start

- Windows Command Prompt:
  set DEBUG=express-lab-11:* & npm start
- MacOs or Linus:
  SET DEBUG=express-lab-11:* & npm start

Task 1: Seed Data

Before working on this, please make sure you have created the tables via MySQL workbench in lab 10.

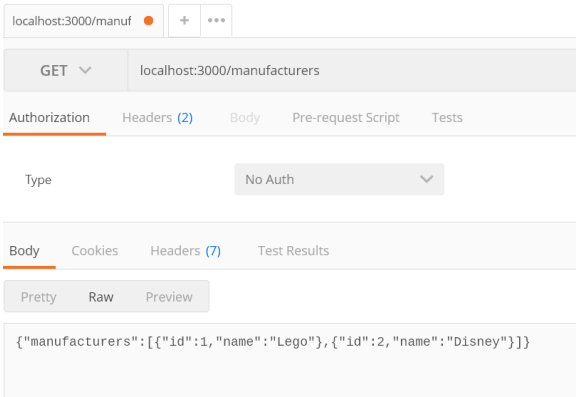
Steps:

- Follow slides 3~5 to set up the **knex.js file.**
- Follow slide 7 to create the **default seed files**.
  - npx knex seed:make initial-manufacturer
  - npx knex seed:make initial-product
- Follow slides 8~10 to update the seed files to use **upsert**.
- Follow slide 11 to execute the seed files.
- Use MySQL workbench to see if the seed data is created.

Task 2: Get the data from Express

Steps:

- Follow slides 15 to set up the **database.js file.**
- Follow slide 16 ~ 18 to setup the **./routes/index.js file**.
  - This should create the List manufacturers API
- Use Postman to test this API
  - GET localhost:3000/manufacturers



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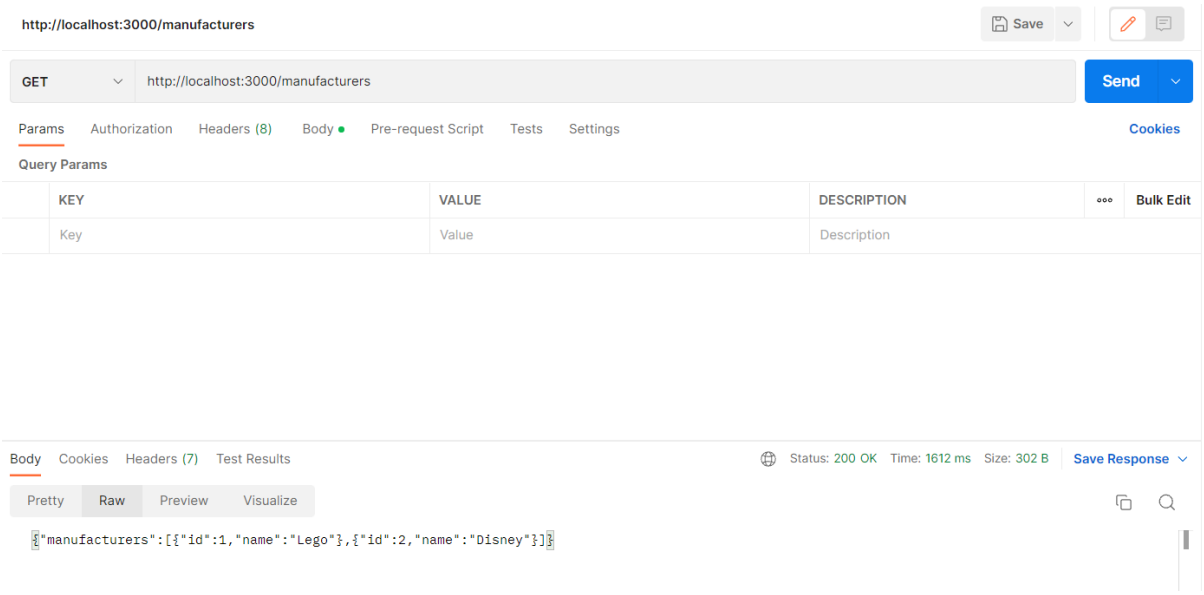
Task 3: List, Retrieve, Create, Update, Delete

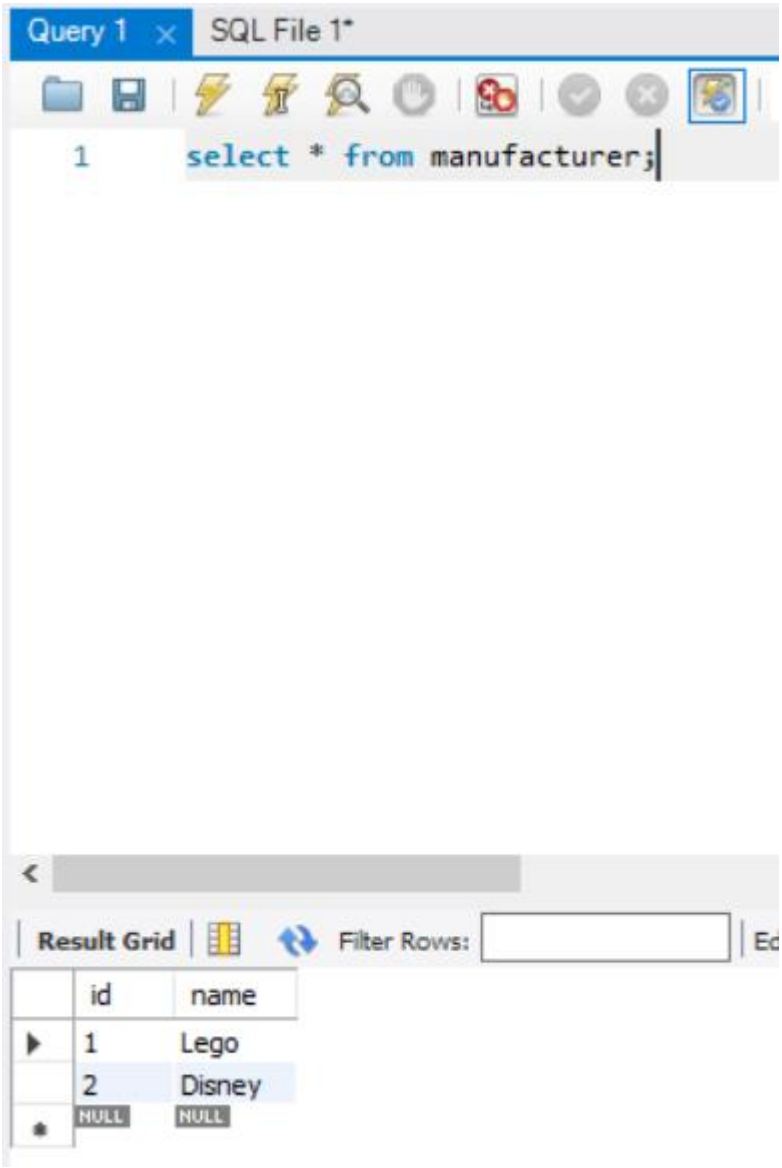
Steps:

- Follow slides 20 ~ 30 to set up the **rest of the manufacturers APIs**
- For each List, Retrieve, Create, Update, Delete API
    - Take a screenshot of Postman to show how you test the API.
    - Take a screenshot of MySQL workbench to show the result Manufacturers table.

For example:

List Manufacturer:




Query 1
SQL File 1*
1
select * from manufacturer;
Result Grid
Filter Rows:
id
name
1
Lego
2
Disney
NULL
NULL

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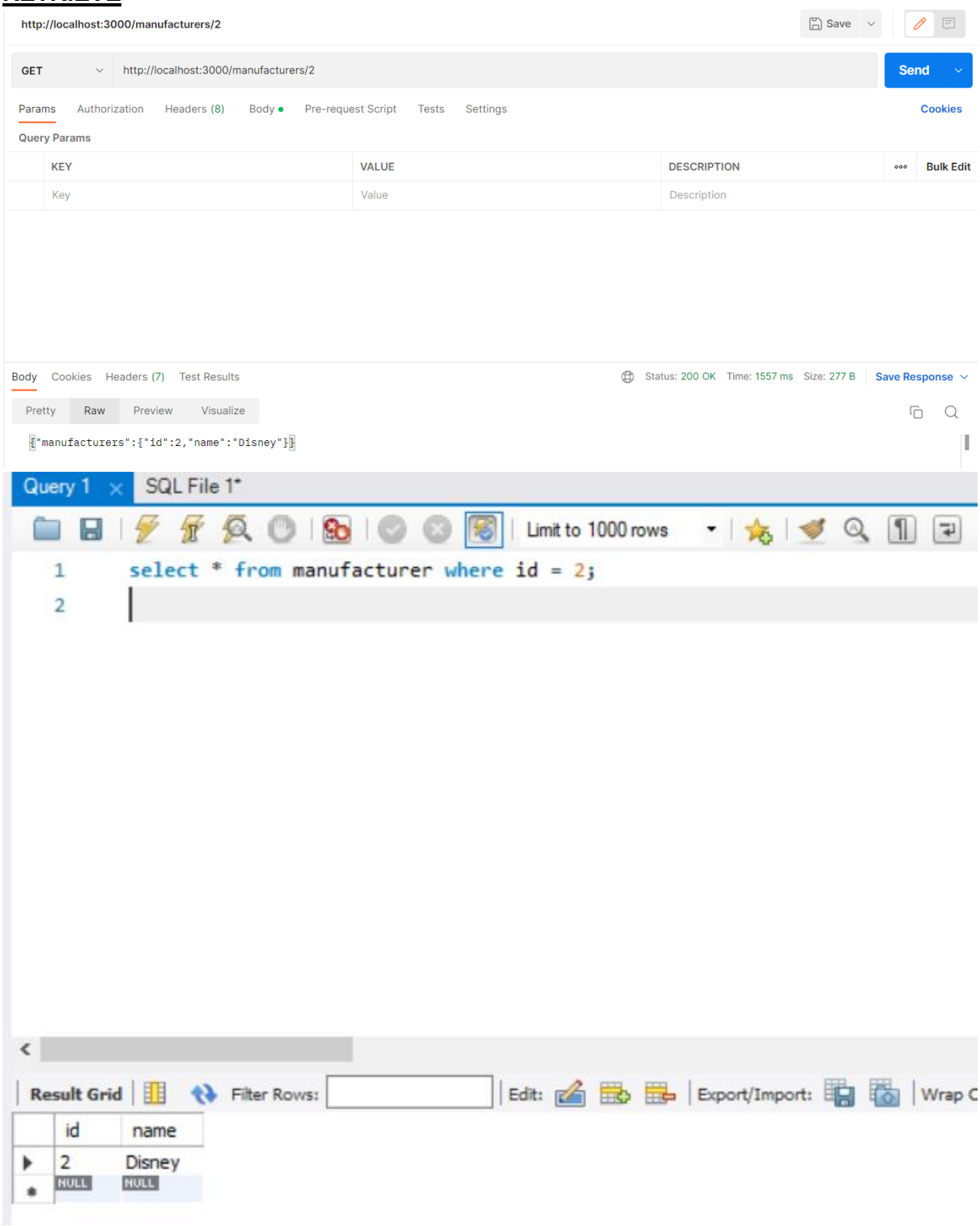
RETRIEVE



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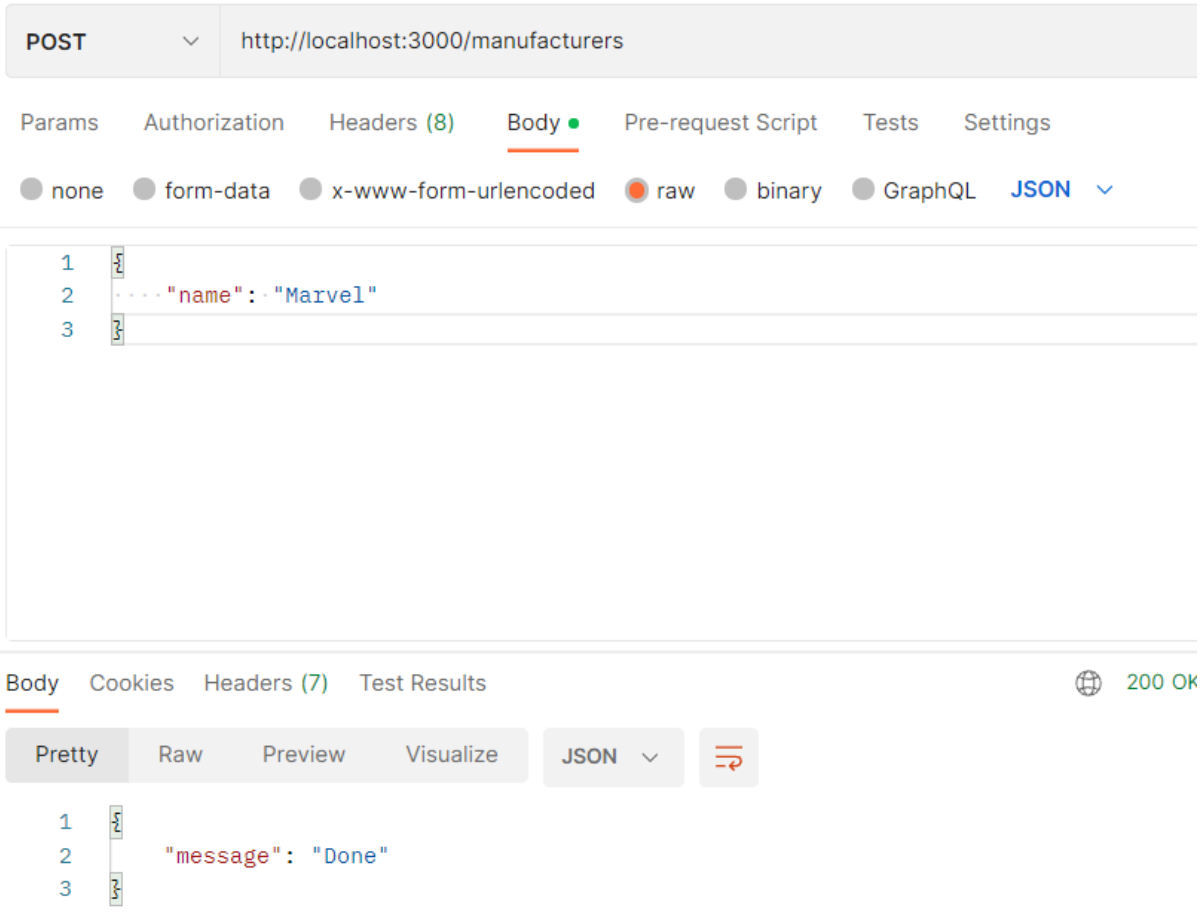
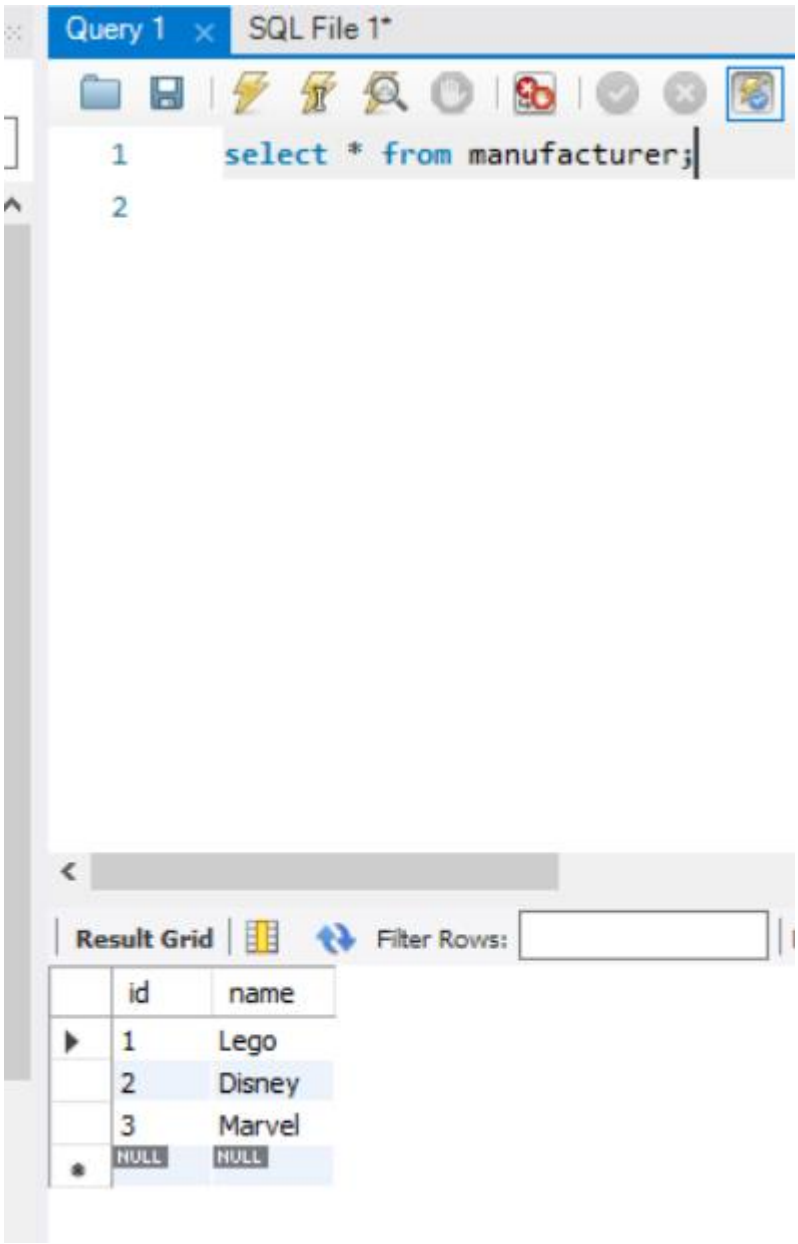
CREATE

http://localhost:3000/manufacturers




Query 1
SQL File 1*
1 select * from manufacturer;
2
Result Grid
Filter Rows:
id
name
1
Lego
2
Disney
3
Marvel
NULL
NULL

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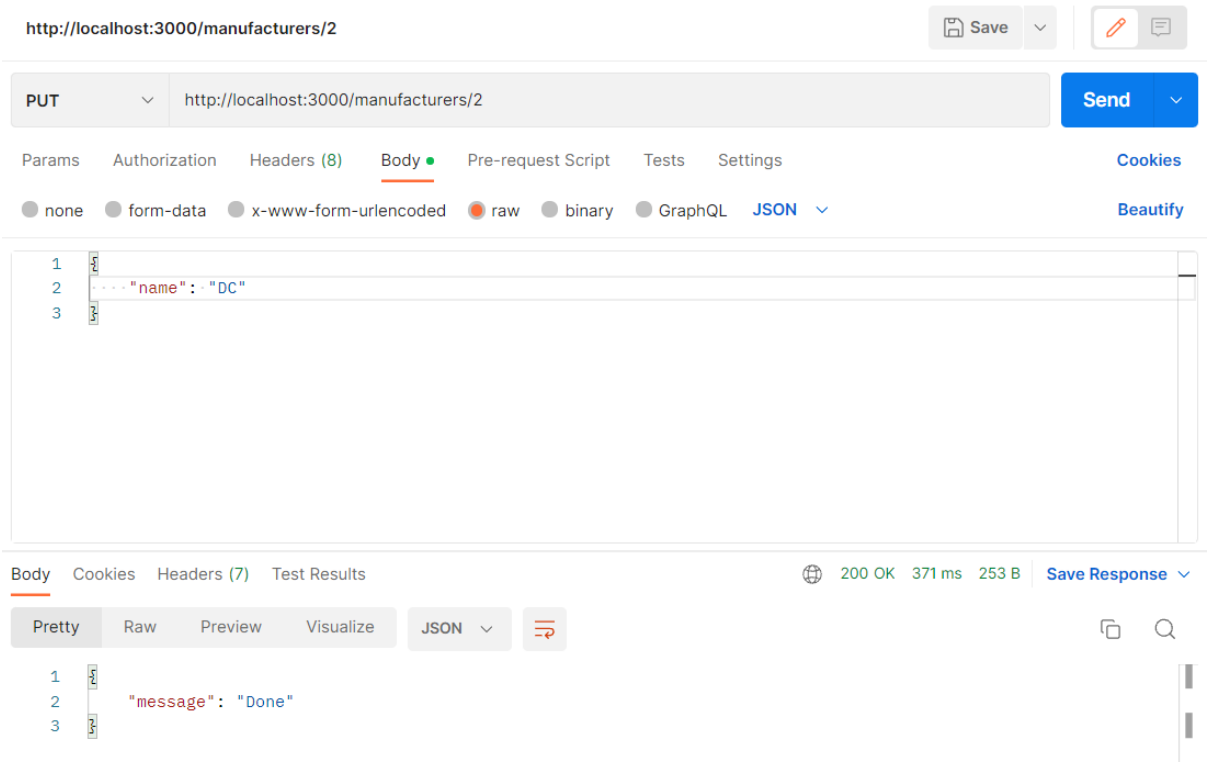
UPDATE



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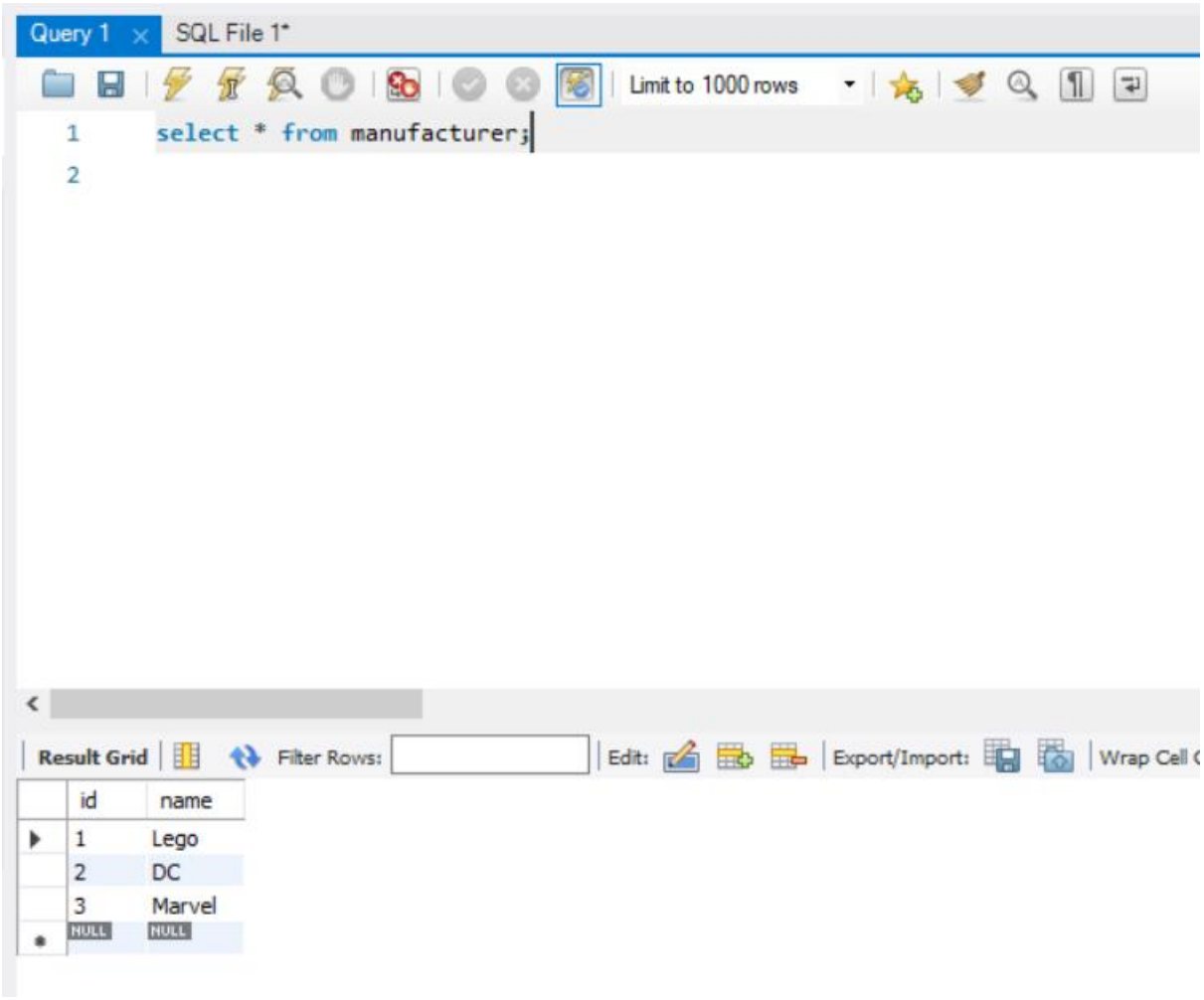
Query 1
SQL File 1*
Limit to 1000 rows
1 select * from manufacturer;
2
Result Grid
Filter Rows:
Edit:
Export/Import:
Wrap Cell
id
name
1
Lego
2
DC
3
Marvel
NULL
NULL

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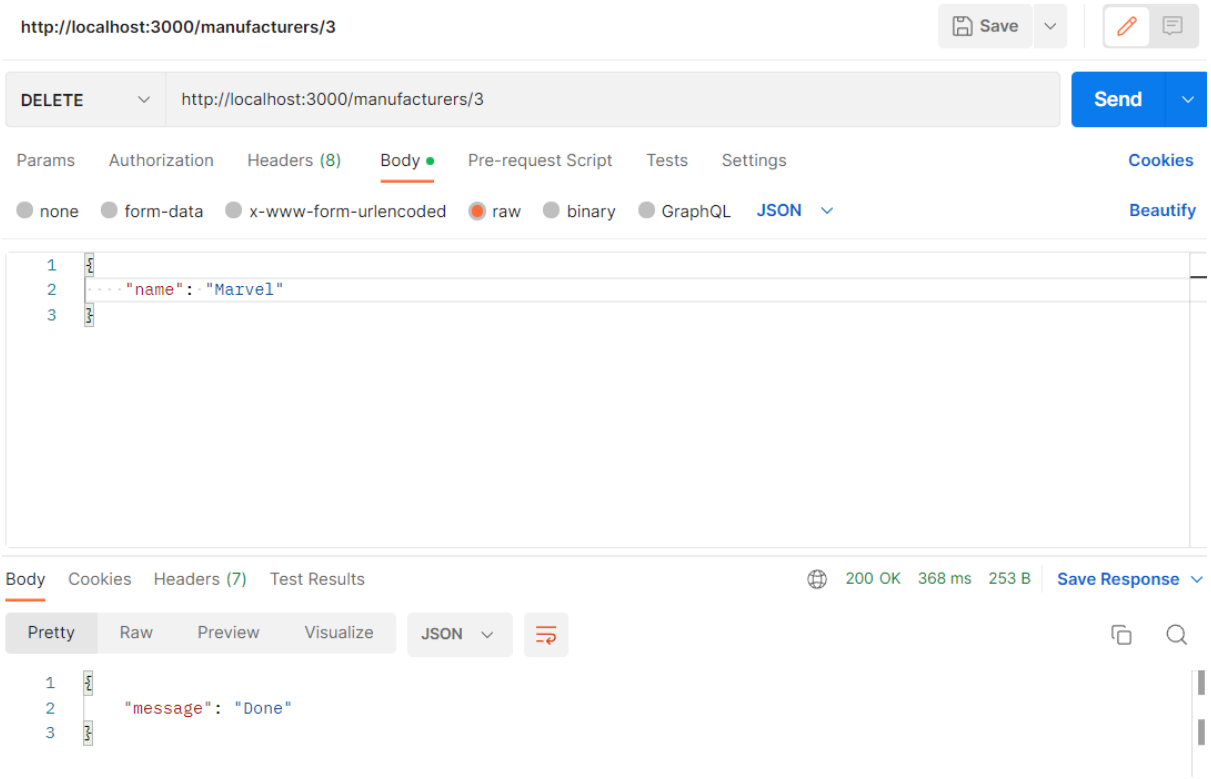
DELETE



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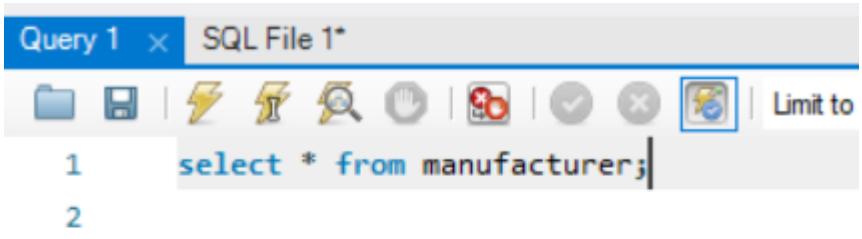
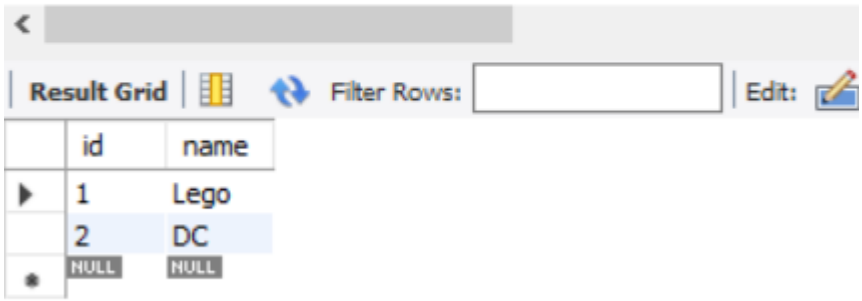

Query 1
SQL File 1*
Limit to
1 select * from manufacturer;
2


Result Grid
Filter Rows:
Edit:
id
name
1
Lego
2
DC
NULL
NULL