

# Simple GraphQL - Flask - SQLAlchemy Application

## The setup:

In this project, you will be setting up a quick GraphQL API. To begin with, here are some quick reading to get you started:

- 1) <http://graphene-python.org/>
- 2) <https://graphql.org/learn/>
- 3) <https://www.sqlalchemy.org/>

A *getting started guide* to setup a simple GraphQL API using Flask and SQLAlchemy ORM is given here.

<http://docs.graphene-python.org/projects/sqlalchemy/en/latest/tutorial/>

Use this tutorial to set up this project. You can use any database of your choice. We recommend using *SQLite* as it can be embedded well within the repository. The project is completely an API only project, a user interface need not be developed.

## Your question:

Setup the project as explained in the link. Extend the code to do the following,

- 1) Add the ability to add a new employee.
- 2) Add the ability to list all existing employees, with their name, id, department name and salary.
- 3) Change the list entry point to show the employees page by page. This would be used in a UI. Some features we're looking for are :
  - a) Ability to see total number of pages in any given page
  - b) Ability to see in which page I am right now.
  - c) Ability to goto Nth page
  - d) Ability to sort by department name and department salary in a paginated manner

Bonus points for well tested code with unit and rest based test cases.

Share the code in a git repo with instructions to set it up. Bring a working set up to the interview.