

# Django Calculator:

1. Set up the Django project:
  - Create a new Django project named "Calculator" using the `django-admin startproject` command.
  - Create a new Django app named "calculator\_app" using the `python manage.py startapp` command.
  - Add the "calculator\_app" to the project's list of installed apps in the project's settings.
2. Define URL patterns:
  - Open the project's `urls.py` file and define the URL patterns.
  - Create a URL pattern for the home page ("/"), which will be the main calculator view.
  - Create URL patterns for each arithmetic operation, such as addition, subtraction, multiplication, and division. Each pattern should include appropriate placeholders for input operands.
3. Create views:
  - Inside the "calculator\_app" directory, open the `views.py` file.
  - Import the necessary modules and define the view functions for each URL pattern created in step 2.
  - Each view function should handle the corresponding arithmetic operation. Perform the calculation and pass the result to the template.
4. Design templates:
  - Create a "templates" directory inside the "calculator\_app" directory. ○ Within the "templates" directory, create an HTML template named "calculator.html" for the calculator's home page. This template should include a form with input fields for operands and buttons for each arithmetic operation.
  - Create separate templates for each arithmetic operation result. Each template should display the operands, the selected operation, and the result.
5. Connect views and templates:
  - Modify the view functions to render the appropriate templates with the calculated results.
  - For the home page view, render the "calculator.html" template containing the form for inputting operands.
  - For the arithmetic operation views, render the appropriate templates that display the operands, operation, and result.

## Guidelines:

- The URL pattern for the home page should be mapped to the main calculator view.

- Each arithmetic operation should have its own URL pattern and corresponding view function.
- The view functions should extract the input operands from the request, perform the arithmetic operation, and pass the result to the corresponding template.
- The home page template should include a form with input fields for operands and buttons for each arithmetic operation.
- Each arithmetic operation result template should display the operands, the selected operation, and the result.

Enhancements (optional):

- Provide additional functionalities, such as support for decimal numbers or advanced operations like square root or exponentiation.
- Add client-side validation to the input fields to ensure that valid numbers are entered.
- Improve the user interface with CSS styling or JavaScript/jQuery interactivity.