Q1. What is Flask Framework? What are the advantages of Flask Framework?

- Flask is a lightweight web framework written in Python. It is a good choice for developing small to medium-scale web applications.
- Advantages of Flask Framework:
  - Lightweight: Flask is a lightweight framework, meaning that it has a small footprint and does not require a lot of resources to run. This makes it a good choice for developing small to medium-scale web applications.
  - Flexible: Flask is a flexible framework, meaning that it can be used to develop a wide variety of web applications. It can be used to develop simple websites, REST APIs, and even complex web applications.
  - Easy to use: Flask is an easy-to-use framework, meaning that it is easy to learn and use. It has a simple and straightforward API.

Q2. Create a simple Flask application to display 'Hello World!!'. Attach the screenshot of the output in Jupyter Notebook.

In [ ]:
```python
from flask import Flask

app = Flask(__name__)

@app.route("/")
def hello_world():
    return ' Hello World! '

if __name__ == '__main__':
    app.run( debug =True)
```

Hello World!

Q3. What is App routing in Flask? Why do we use app routes?

- App routing in Flask is the process of mapping URLs to functions. This allows us to handle different requests based on the URL that the user is requesting.
- We use app routes to make our Flask applications more organized and maintainable. It also makes it easier to add new features to our applications.

Q4. Create a "[welcome" route to display the welcome message "Welcome to ABC Corporation" and a "/" route to show the following details:

- Company Name: ABC Corporation
- Location: India
- Contact Detail: 999-999-9999
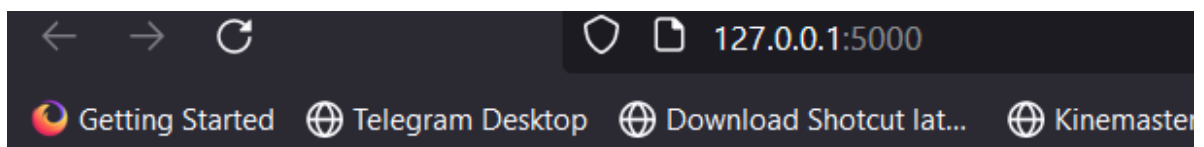- Attach the screenshot of the output in Jupyter Notebook.

In [ ]:
```python
from flask import Flask

app = Flask(__name__)

@app.route('/welcome')
def home():
    return "<h1>Welcome to ABC Corporation</h1>"

@app.route('/')
def company():
    return '''
Company Name: ABC Corporation
Location: India
Contact Detail: 999-999-9999'''

if __name__ == '__main__':
    app.run(host='0.0.0.0' , debug = True)
```
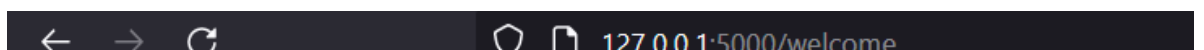

Company Name: ABC Corporation Location: India Contact Detail: 999-999-9999

Welcome to ABC Corporation

Q5. What function is used in Flask for URL Building? Write a Python code to demonstrate the working of the url_for() function.

The url_for() function is used in Flask for URL building. It takes the name of a function as input and returns the corresponding URL.

Here is a simple example of how to use the url_for() function:

In [ ]:
```python
from flask import Flask, url_for

app = Flask(__name__)

@app.route("/")
def home():
    return "This is the home page."

if __name__ == "__main__":
  # Generate the URL for the home page
  home_url = url_for("home")

  # Print the URL to the console
  print(home_url)
```