

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

Answer.

Flask is a micro web framework written in Python. It is classified as a microframework because it does not require specific tools or libraries. It has no database abstraction layer, form validation, or any other components where pre-existing third-party libraries provide common functions.

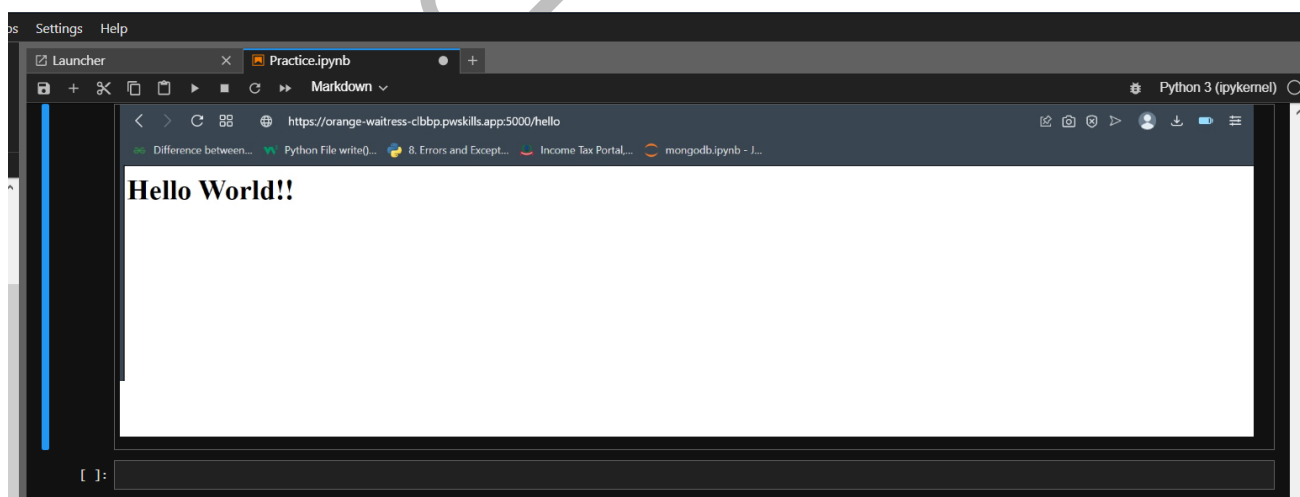
The advantages of the Flask framework are as follows,

- *It is a lightweight framework that offers hassle-free development
- *Provide flexibility to the developer to experiment with their modules or architecture
- *It is suitable for small projects
- *Offers a built-in development server and fast debugger
- *Easily scalable for the applications
- *Support for secure cookies
- *Uses Jinja2 Template engine
- *It has integrated support for unit testing
- *APIs are coherent and neat

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

Answer:

```
from flask import flask
app=Flask(__name__)
@app.route('/hello')
def hello():
    return "<h1>Hello World!!</h1>"
if __name__=="__main__":
    app.run(host="0.0.0.0")
```



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

Answer: App routing is the technique used to map the specific URL with the associated function intended to perform some tasks. the routing technique is used to help users remember application URLs. It is helpful to access the desired page directly without navigating from the home page.

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

Answer:

```
from flask import Flask
```

```
app=Flask(__name__)
```

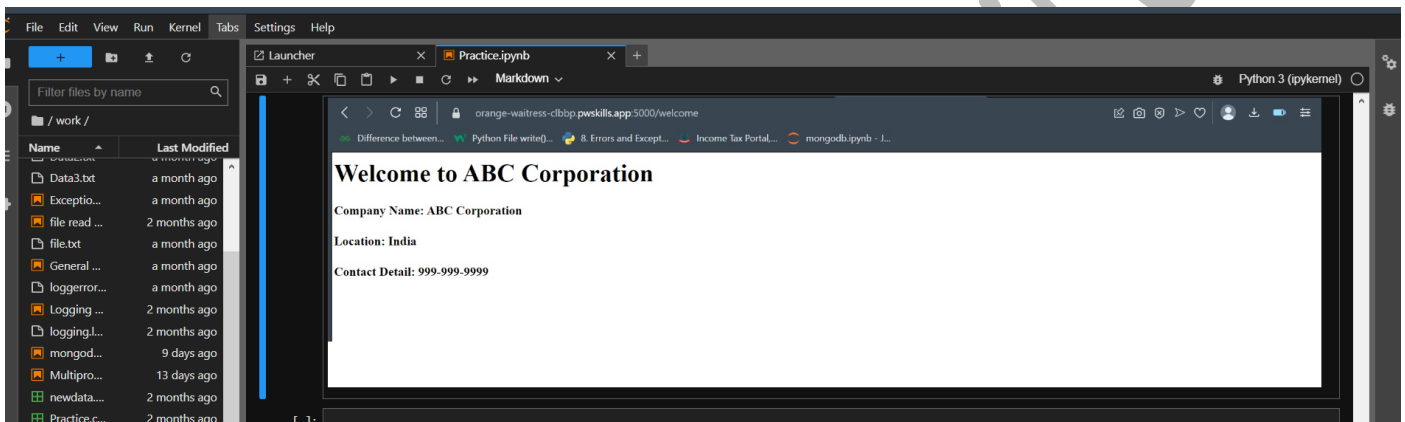
```
@app.route("/welcome")
```

```
def hello():
```

```
    return "<h1>Welcome to ABC Corporation </h1> <h4>Company Name: ABC Corporation</h4> <h4>Location: India</h4> <h4>Contact Detail: 999-999-9999</h4>"
```

```
if __name__=="__main__":
```

```
    app.run(host="0.0.0.0")
```



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

Answer: The url_for() function is very useful for dynamically building a URL for a specific function. The function accepts the name of a function as first argument, and one or more keyword arguments, each corresponding to the variable part of URL.

```
From flask import Flask,redirect,url_for
app= Flask(__name__)
```

```
@app.route("/admin")
```

```
def hello_admin():
```

```
    return"Hello Admin!!"
```

```
@app.route('/guest/<guest>')
```

```
def hello_guest():
```

```
    return "hello %s as guest" %guest
```

```
@app.route("/user<name>")
```

```
def hello_user(name):
```

```
    if (name=="admin"):
```

```
        return redirect(url_for("hello_admin"))
```

```
    else:
```

```
        return redirect(url_for("hello_guest",guest=name))
```

```
if __name__=="__main__":
```

```
    app.run(host="0.0.0.0")
```