

ANS-1-

Flask is a micro web framework for Python. It is a lightweight and flexible framework that provides a simple and easy-to-use interface for building web applications. Some advantages of Flask Framework are:

Lightweight and flexible

Easy to learn and use

Has a large community and lots of documentation and resources available

Has built-in support for unit testing and debugging

Can be easily extended with third-party libraries and plugins

Supports a wide range of web development tasks and scenarios.

ANS-2-

App routing in Flask refers to the process of mapping URLs to functions in a Flask application. This is done using the `@app.route()` decorator, which associates a URL with a specific function in the application.

We use app routes in Flask to define the URLs that will be used to access different parts of our application. This allows us to create a logical and organized structure for our application, and makes it easy for users to navigate between different pages and features. App routes also provide a way to map incoming requests to specific functions in our application, allowing us to control how our application handles different types of requests.

ANS-3-

Code:-

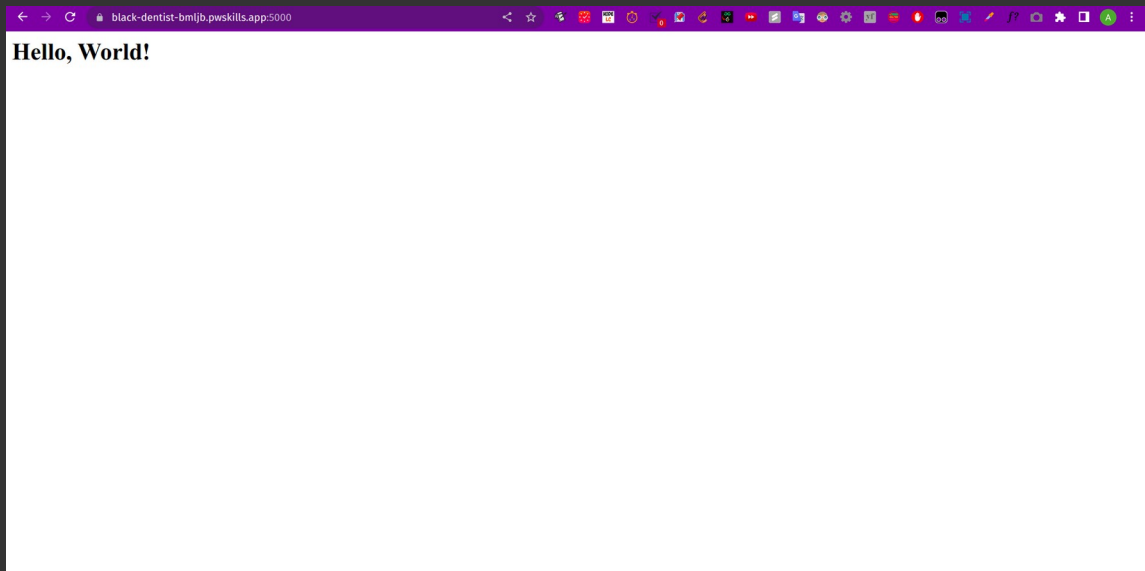
```
from flask import Flask

app = Flask(__name__)

@app.route("/")
def hello_world(): #simple flask application to output hello world
    return "<h1>Hello, World!</h1>"

if __name__=="__main__":
    app.run(host="0.0.0.0")
```

Results:-



ANS-4-

Code:-

```
from flask import Flask

app = Flask(__name__)

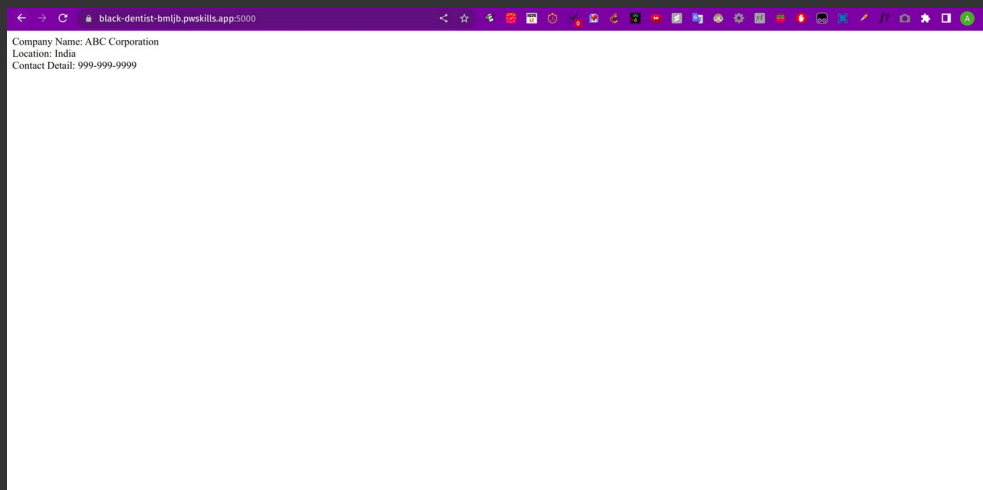
@app.route("/")
def hello_world():
    a="Company Name: ABC Corporation <br> Location: India <br> Contact Detail: 999-999-9999"
    return a

@app.route("/welcome")
def welcome():
    return "Welcome to ABC Corporation"

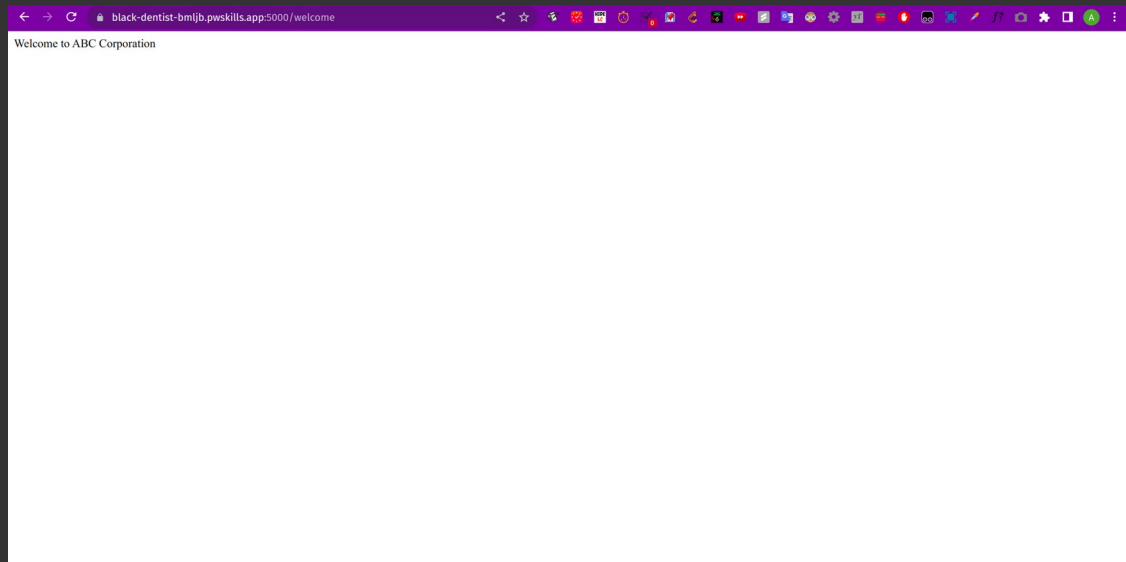
if __name__=="__main__":
    app.run(host="0.0.0.0")
```

Results:-

Normal Page:-



Welcome Page:-



ANS-5-

We can use the "url_for()" function to generate URL for a given endpoint, if the url is already defined for the endpoint then we can even make multiple url's point to the same endpoint.

```
from flask import Flask, url_for
```

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

```
@app.route("/")
def hello_world():
    a="hello world"
    return a
```

```
with app.test_request_context():
    hello_wr=url_for("hello_world")
    print(hello_wr) #/hello is the op
```

```
if __name__=="__main__":
    app.run(host="0.0.0.0")
```