

#### Assignment -4

Assignment Date	26 October 2022
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Student Roll Number	CS19016
Maximum Marks	2 Marks

#### Question-1:

- 1.Pull an Image from docker hub and run it in docker playground.
- 2.Create a docker file for the jobportal application and deploy it in Docker desktop application.
- 3.Create a IBM container registry and deploy helloworld app or jobportalapp.
- 4.Create a Kubernetes cluster in IBM cloud and deploy helloworld image or jobportal image and also expose the same app to run in nodeport.

#### Solution:

##### HTML

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>FlaskBlog</title>
</head>
<body style="background-color:green;">
  <h1>Welcome to Hello page</h1>
  <h1>This is a demo page for Docker & Kubernetes</h1>
</body>
</html>
```

##### Dockerfile

```
FROM python:3.10.4
WORKDIR /app
COPY requirements.txt ./
RUN pip install -r requirements.txt
```

COPY . .

EXPOSE 5000

CMD ["python","./app.py"]

### **Python**

```
from flask import Flask, render_template, request, url_for, flash, redirect
```

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

```
app.config['SECRET_KEY'] = 'df0331cefc6c2b9a5d0208a726a5d1c0fd37324feba25506'
```

```
@app.route('/')
```

```
def index():
```

```
    return render_template('index.html')
```

```
if __name__ == '__main__':
```

```
    app.run(host='0.0.0.0', port=5000, debug=True)
```