```python
import numpy as np
from flask import Flask, request, jsonify

import joblib  # Used to load your machine learning model

app = Flask(__name__)

# Load your machine learning model
model = joblib.load("KNeighborsClassifier.pkl")

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

@app.route('/predict', methods=['POST'])
def predict():
    # Get data from POST request

    data = request.get_json()
    print(data)
    data=np.expand_dims(data, axis=0)

    # Make predictions using your model
    prediction = model.predict(data)
```

```python
y_pred=model.predict(x)
print("Predicted Output",y_pred)
print("actual Output ",y)
score=accuracy_score(y,y_pred)
print(score)
```

```
Predicted Output [6 5 1 4 6 2 3 6 4 1 5 0 6 4 5 0 6 4 6 5 3 2 5 6 3 4 1 6 5 3 4 5 6 1 4 6 1
 5 0 5 3 1 4 6 5 1 3 4 6 1 4 3 6 5 2 4 6 3 3 5 6 3 4 0 6 5 3 1 0 3 4 6 4 6
 5 0 4 3 0 5 1 6 5 3 4 5 0 6 1 5 5 1 6 0 4 0 6 5 3]
actual Output  0     6
1     5
2     1
3     4
4     6
     ..
94    4
95    0
96    6
97    5
98    3
Name: Fertilizer Name, Length: 99, dtype: int32
0.898989898989899
```

```
[27] x_test.shape
```
Python

```
(20, 8)
```

```
[28] type(x_test)
```
Python

```
pandas.core.frame.DataFrame
```

```
[29] x_test.values[0]
```
Python

```
array([30, 60, 58,  2,  8, 10,  7, 32], dtype=int64)
```

```
[ ] array(, dtype=int64)
    [30, 60, 58,  2,  8, 10,  7, 32]
```
Python

```
[34] column_vector = np.expand_dims(x_test.values[0], axis=0)
```
Python

```
[35] model.predict(column_vector)
```
Python

```
import numpy as np
import requests
import json

# Define the URL of your Flask API
url = "http://127.0.0.1:5000/predict"  # Replace with the correct URL if hosted elsewhere

# Define the input data as a dictionary (replace with your actual input data)
# input_data = {
#     "feature1": 1.0,
#     "feature2": 2.0
# }

# input_data=[30, 60, 58,  2,  8, 10,  7, 32]
i=19
input_data=x_test.values[i].tolist()
print(y_test.values[i])
# input_data=np.array(input_data)

# Send a POST request with JSON data
response = requests.post(url, json=input_data)

# Check the response status code
if response.status_code == 200:
    result = response.json()
    prediction = result['prediction']
    print(f"Prediction: {prediction}")
else:
    print(f"Error: {response.status_code}")
```

```
0
Prediction: [1]
```

```python
import numpy as np
import requests
import json

# Define the URL of your Flask API
url = "http://127.0.0.1:5000/predict"  # Replace with the correct URL if hosted elsewhere

# Define the input data as a dictionary (replace with your actual input data)
# input_data = {
#     "feature1": 1.0,
#     "feature2": 2.0
# }

input_data=[30, 60, 58,  2,  8, 10,  7, 32]

# input_data=np.array(input_data)

# Send a POST request with JSON data
response = requests.post(url, json=input_data)

# Check the response status code
if response.status_code == 200:
    result = response.json()
    prediction = result['prediction']
    print(f"Prediction: {prediction}")
else:
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```

```
Prediction: [1]
```