

```
In [35]: print('Training accuracy: ',accuracy_score(y_train,Rn_train_pred))
print('Testing accuracy: ', accuracy_score(y_test,Rn_test_pred))
```

Training accuracy: 0.9902758932609679  
Testing accuracy: 0.968340117593849

Based on Testing and Training Accuracy , we prefer Logistic Regression model for the project

## IBM - Deployment

```
In [36]: !pip install -U ibm-watson-machine-learning
```

```
Requirement already satisfied: ibm-watson-machine-learning in /opt/conda/envs/Python-3.9/lib/python3.9/site-packages (1.0.257)
Requirement already satisfied: requests in /opt/conda/envs/Python-3.9/lib/python3.9/site-packages (from ibm-watson-machine-learning) (2.26.0)
Requirement already satisfied: packaging in /opt/conda/envs/Python-3.9/lib/python3.9/site-packages (from ibm-watson-machine-learning) (21.3)
Requirement already satisfied: pandas<1.5.0,>=0.24.2 in /opt/conda/envs/Python-3.9/lib/python3.9/site-packages (from ibm-watson-machine-learning) (1.3.4)
Requirement already satisfied: importlib-metadata in /opt/conda/envs/Python-3.9/lib/python3.9/site-packages (from ibm-watson-machine-learning) (4.8.2)
Requirement already satisfied: ibm-cos-sdk==2.11.* in /opt/conda/envs/Python-3.9/lib/python3.9/site-packages (from ibm-watson-machine-learning) (2.11.0)
Requirement already satisfied: tabulate in /opt/conda/envs/Python-3.9/lib/python3.9/site-packages (from ibm-watson-machine-learning) (0.8.9)
Requirement already satisfied: certifi in /opt/conda/envs/Python-3.9/lib/python3.9/site-packages (from ibm-watson-machine-learning) (2022.9.24)
```

```
In [50]: model_id = wml_client.repository.get_model_id(model_details)
         model_id
```

```
Out[50]: '3cdfad5b-517f-4b94-a5f1-d47cf14e58e5'
```

```
In [51]: #set meta
         deployment_props = {
             wml_client.deployments.ConfigurationMetaNames.NAME:DEPLOYMENT_NAME,
             wml_client.deployments.ConfigurationMetaNames.ONLINE:{}
         }
```

```
In [52]: #Deploy
         deployment=wml_client.deployments.create(
             artifact_uid=model_id,
             meta_props=deployment_props
         )
```

```
#####

Synchronous deployment creation for uid: '3cdfad5b-517f-4b94-a5f1-d47cf14e58e5' started

#####
```

# models Deployed Online

API reference Test

## Code snippets

cURL Java JavaScript Python Scala

```
import requests

# NOTE: you must manually set API_KEY below using information retrieved from your IBM Cloud account.
API_KEY = "<your API key>"
token_response = requests.post('https://iam.cloud.ibm.com/identity/token', data={"apikey":
API_KEY, "grant_type": 'urn:ibm:params:oauth:grant-type:apikey'})
mltoken = token_response.json()["access_token"]

header = {'Content-Type': 'application/json', 'Authorization': 'Bearer ' + mltoken}

# NOTE: manually define and pass the array(s) of values to be scored in the next line
payload_scoring = {"input_data": [{"fields": [array_of_input_fields], "values": [array_of_values_to_be_scored, another_array_of_values_to_be_scored]}]}

response_scoring = requests.post('https://us-south.ml.cloud.ibm.com/ml/v4/deployments/f824b4c2-e5cc-43f2-a58c-48f70a9c5ae1/predictions?version=2022-11-
headers={'Authorization': 'Bearer ' + mltoken})
```