```
Steps to be followed are shown in screenshots below:
rhutvij@rhutvij-HP-Pavilion-Notebook:-/Desktop$ cd cancer_classify
rhutvij@rhutvij-HP-Pavilion-Notebook:-/Desktop/cancer_classify$ sudo docker load -i cancer_classify_c108f040-1c84-4c2e-b5da-74ec526b154c_2.tar
[sudo] password for rhutvij:
db3f954404c: Loading layer 58.44MB/58.44MB
07930e7d22be: Loading layer 6.859MB/6.859MB
218deec5453a: Loading layer 70.12MB/70.12MB
eer62c222e7fe: Loading layer 70.12MB/70.12MB
ecf2c222e7fe: Loading layer 7.632MB/7.632MB
cebe21d24a90: Loading layer 7.632MB/7.632MB
d86f1d61a964: Loading layer 147.5kB/147.5kB
85b455fdae0f: Loading layer 54.89MB/5.489MB
c92c0deaa10c: Loading layer 16.17MB/16.17MB
0b1f154e4461: Loading layer 748.2MB/748.2MB
Loaded image: acumos-devchallenge-nexus:18001/cancer_classify_c108f040-1c84-4c2e-b5da-74ec526b154c:2
rhutvij@rhutvij-HP-Pavilion-Notebook:-/Desktop/cancer_classify$ sudo docker images
REPOSITORY TAG IMAGE ID CREATED
                                                                                                                                                                                     IMAGE ID
                                                                                                                                                                                                                       CREATED
                                                                                                                                                                                     ad7b13f3c951
                                                                                                                                                                                                                                                        1.38GB
1.85kB
  cumos-devchallenge-nexus:18001/cancer_classify_c108f840-1c84-4c2e-b5da-74ec526b154c
                                                                                                                                                                                                                      2 days ago
4 weeks ago
                                                                                                                                                   latest
 hello-world
                                                                                                                                                                                     2cb8d9787c4d
  rhutvij@rhutvij-HP-Pavilion-Notebook:~/Desktop/cancer_classify$ protoc cancer_classify1.proto --python_out=.
rhutvij@rhutvij-HP-Pavilion-Notebook:~/Desktop/cancer_classify$ ls
cancer_classification.py cancer_classify1.proto cancer_test_data.csv
                                                                                                                                                                                       cancer_test_data.csv
cancer_test.py
cancer_train_data.csv
 cancer_classify
cancer_classify1_pb2.py cancer_classify_c108f040-1c84-4c2e-b5da
rhutvij@rhutvij-HP-Pavilion-Notebook:~/Desktop/cancer_classify$

    tancer_classify

                                                                                                                                                                                            Source Console - Object
                                                                         temp.py X cancer_test.py X
                                                                                                                                                                                         ٥
     • 🖨 _pycache
                                                                                     df.perimeter_worst.append(v23)
         acancer classification.py
                                                                                    df.area_worst.append(v24)
df.smoothness_worst.append(v25)
         acancer_classify1_pb2.py
         cancer_classify1_proto
                                                                                     df.compactness_worst.append(v26)
                                                                                                                                                                                                                   Here you can get help of any object
                                                                                    df.concavity_worst.append(v27)
df.concave_points_worst.append(v28)
                                                                                                                                                                                                                   by pressing Ctrl+I in front of it,
         cancer_test.py
         acancer train data.csv
                                                                                     df.symmetry_worst.append(v29)
                                                                                                                                                                                                                   either on the Editor or the Console.
                                                                            38
39
                                                                                    df.fractal_dimension_worst.append(v30)
                                                                                                                                                                                                                   Help can also be shown
                                                                                    df.area mean.append(v4)
                                                                                                                                                                                                                   automatically after writing a left
                                                                                                                                                                                                                   parenthesis next to an object. You
                                                                           41 42
                                                                                    r = requests.post(restURL, df.SerializeToString())
                                                                                                                                                                                                                   can activate this behavior in
                                                                                    of = pb.ClassifyOut()
                                                                                                                                                                                                                   Preferences > Help.
                                                                           44
                                                                                    of.ParseFromString(r.content)
                                                                           45
                                                                                                                                                                                               Variable explorer File explorer Help
                                                                                    return of.value[8]
                                                                                                                                                                                             Python console
                                                                           47
                                                                                                                                                                                             Console 1/A x
                                                                                                                                                                                             Predicted: 1, Actual: 1
                                                                           50
51 import pandas as pd
                                                                                                                                                                                             Predicted: 1, Actual: 1
                                                                                                                                                                                             Predicted: 1, Actual: 1
                                                                                                                                                                                             Predicted: 1. Actual: 1
                                                                           55 test_dataset = pd.read_csv('cancer_test_data.csv')
54 Xtest = test_dataset.iloc[:, 2:33].values
55 ytest = test_dataset.iloc[:, 1].values
                                                                                                                                                                                              Predicted: 1, Actual: 1
                                                                                                                                                                                             Predicted: 1, Actual: 1
                                                                                                                                                                                             Predicted: 1, Actual: 1
                                                                                                                                                                                              Predicted: 1, Actual: 1
                                                                           57 # Feature Scaling of training data
                                                                                                                                                                                             Predicted: 1, Actual: 1
                                                                                                                                                                                             Predicted: 1, Actual: 1
                                                                           59 sc = StandardScaler()
                                                                                                                                                                                              Predicted: 1, Actual: 1
                                                                            50 X = sc.fit_transform(Xtest)
                                                                                                                                                                                             Predicted: 1, Actual: 1
                                                                                                                                                                                             Predicted: 1, Actual: 1
                                                                                                                                                                                              Predicted: 1, Actual: 1
                                                                                                                                                                                              Predicted: 1, Actual: 1
                                                                                                                                                                                             Predicted: 1, Actual: 1
                                                                           65 acc=8
66 tot=8
                                                                                                                                                                                              Predicted: 1, Actual: 1
                                                                                                                                                                                              Predicted: 1, Actual: 1
```

Predicted: 8, Actual: 8

Predicted: 0, Actual: 0

Predicted: 0, Actual: 0

Predicted: 0, Actual: 0

Predicted: 0, Actual: 0 Predicted: 0, Actual: 0

Predicted: 1, Actual: 1

Accuracy=90.35887719298247

[11 77]]

67 ypred=[]

69

68 for i in range(len(X)):

acc+=1

ypred=ypred+[classify_cancer(*(X[i]))]

75 from sklearn.metrics import confusion matrix

if int(ypred[i])==ytest[i]:

76 conmax = confusion_matrix(ytest, ypred)

tot+=1

77 print(connex)