Graphical user interface, text, application, email

Description automatically generated

This code defines a function called prediction\_svm () that performs face recognition using a support vector machine (SVM) classifier.

Here's what each line does:

def prediction\_svm():: defines a function called prediction\_svm().

test\_image = face\_recognition.load\_image\_file("shahrukh\_khan.jpg"): loads an image file called "shahrukh\_khan.jpg" into a NumPy array using the

load\_image\_file() function from the face\_recognition library.

face\_locations = face\_recognition.face\_locations(test\_image): uses the face\_locations() function from the face\_recognition library to find the locations

of all the faces in the test image.

num = len(face\_locations): calculates the number of faces detected in the image by getting the length of the face\_locations list.

print("Number of faces detected: ", num): prints the number of faces detected in the image to the console.

test\_image\_enc = face\_recognition.face\_encodings(test\_image)[0]: uses the face\_encodings() function from the face\_recognition library to

encode the face(s) in the test image into a 128-dimensional vector, and assigns the first encoding to the variable test\_image\_enc.

This encoding will be used later to compare with other face encodings in the dataset using an SVM classifier to determine if the face(s) in the

test image match any faces in the dataset.