**Face Detection**

Downloaded any image from Google and renamed the file name as "test1" and saved. Uploaded the image under CIS folder.(In the last time of face\_detection.py file, change the code to face\_detect(test1.jpg))

Run the Face\_Detection.py file , Face detection is done by cv2(open cv) and face\_recognition libraries which we have imported.The face will be detected in a red square box

Explanation for program:

* face\_detect() is function call
* cv2.imread() is used to read the image
* face\_recognition - Library used for face recognition. , it calls a function called load\_image\_file which converts the loaded image into a FaceRecognition object.

face\_location() function is used for Feature extraction.It extracts the coordinates from a given image likie top, right, bottom, left. These locations are stored with the original image and draw a rectangle around them using cv2's rectangle method with color values ranging from 0 to 255 (black).

Finally, after drawing these rectangles on screen we call cv2's imshow() method to display what was drawn while waiting for user input via keyboard press before destroying all windows with cv2's destroyAllWindows() method

It then proceeds to use cv2.rectangle() to draw a rectangle around the area where the face is located

After successful extraction, cordinates will be stored in the database.

Furthur will be working on the verification and identification part.

**Python File in Pycharm**

Graphical user interface, text, application

Description automatically generated

**Result**

A person with red hair

Description automatically generated with low confidence