Task # 2
Computer Vision

Task:

- Use OpenCV to record a video of yourself from your laptop.

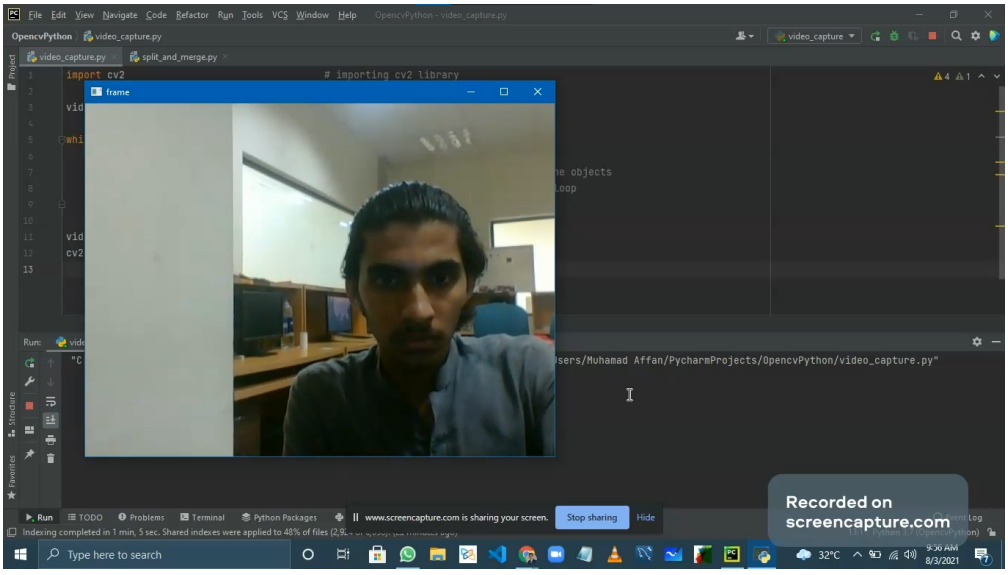
Code:

```
import cv2                                  # importing cv2 library

vid = cv2.VideoCapture(0)                   # making a video capture object

while (True):                               # running an infinite loop
    ret, frame = vid.read()                 # reading frames from the object
    cv2.imshow('frame', frame)              # displaying the frames captured
                                            # from the objects
    if cv2.waitKey(1) & 0xFF == ord('e'):   # if 'e' is pressed break the
                                            # infinite loop
        break

vid.release()                               # unlocking the video capture
                                            # object
cv2.destroyAllWindows()                     # closing all the opened windows
```

Result:

Video Link: https://bit.ly/3ypqH6q.

Screenshot:



Conclusion:

A video is made up of frames where each frame is an image. All frames have the same resolution. The speed at which the frames are moved is called frame rate and is measured in FPS (Frames Per Second). If a video is 30fps and the other is 60fps then the video with 60fps will be smoother and faster. If we continuously take images and display them on the screen we will get a live video.