1. **Capture video from web Camera and Display the video, in slow motion and in fast motion operations on the captured video.**

**Aim:**

The Aim is to Capture video from web Camera and Display the video, in slow motion and in fast motion operations on the captured video.

**Code:**

import cv2

cap = cv2.VideoCapture(0)

if not cap.isOpened():

print("Error: Unable to access the webcam")

exit()

print("Press 's' for slow motion, 'f' for fast motion, 'n' for normal speed, and 'q' to quit.")

delay = 30

while True:

ret, frame = cap.read()

if not ret:

print("Error: Unable to read from webcam")

break

cv2.imshow("Webcam Video", frame)

key = cv2.waitKey(delay) & 0xFF

if key == ord('q'):

break

elif key == ord('s'):

delay = 100

elif key == ord('f'):

delay = 10

elif key == ord('n'):

delay = 30

cap.release()

cv2.destroyAllWindows()

**Result:**

The captured video is read and displayed successfully.