DSA0210 Computer Vision with Open CV LAB Experiments

Experiment-2: Perform basic video processing operations on the captured video

PROGRAM:

```python
import cv2


# Video file path

video_path =
r"C:\Users\VASANTH\Downloads\opencv\sources\doc\js_tutorials\js_assets\cup.mp4"


# Open the video

video = cv2.VideoCapture(video_path)


# Check if video opened successfully

if not video.isOpened():

    raise FileNotFoundError("Video file not found. Check the path or filename.")


print("Press 's' for Slow motion")

print("Press 'f' for Fast motion")

print("Press 'n' for Normal speed")

print("Press 'q' to Quit")


delay = 30  # normal speed


while True:

    ret, frame = video.read()


    # End of video

    if not ret:
```

```python
        break

    cv2.imshow("Video Playback", frame)

    key = cv2.waitKey(delay) & 0xFF

    if key == ord('q'):
        break
    elif key == ord('s'):
        delay = 100   # Slow motion
    elif key == ord('f'):
        delay = 10    # Fast motion
    elif key == ord('n'):
        delay = 30    # Normal speed

# Release resources
video.release()
cv2.destroyAllWindows()
```

OUTPUT: