

26. Implement a function to reverse the frames of the video to create a video in reverse mode using Open CV.

PROGRAM:

```
import cv2
```

```
def reverse_video(input_video_path, output_video_path):
```

```
    # Open the video
```

```
    cap = cv2.VideoCapture(r"C:\Users\harik\Downloads\CV LAB\mountain video.mp4")
```

```
    # Check if the video opened successfully
```

```
    if not cap.isOpened():
```

```
        print("Error: Unable to open video file.")
```

```
        return
```

```
    # Get video properties
```

```
    frame_width = int(cap.get(cv2.CAP_PROP_FRAME_WIDTH))
```

```
    frame_height = int(cap.get(cv2.CAP_PROP_FRAME_HEIGHT))
```

```
    frame_rate = int(cap.get(cv2.CAP_PROP_FPS))
```

```
    # Create VideoWriter to save the reversed video with 'mp4v' codec
```

```
    fourcc = cv2.VideoWriter_fourcc(*'mp4v') # Use 'mp4v' for MP4 compatibility
```

```
    out = cv2.VideoWriter(output_video_path, fourcc, frame_rate, (frame_width, frame_height))
```

```
    # Store all frames in a list
```

```
    frames = []
```

```
    while True:
```

```
        ret, frame = cap.read()
```

```
        if not ret:
```

```
            break
```

```
        frames.append(frame)
```

```
# Reverse the frames
```

```
frames.reverse()
```

```
# Write the reversed frames to the output video
```

```
for frame in frames:
```

```
    out.write(frame)
```

```
# Release resources
```

```
cap.release()
```

```
out.release()
```

```
cv2.destroyAllWindows()
```

```
print(f"Video reversed successfully! Output saved to {output_video_path}")
```

```
# Example usage
```

```
input_video_path = 'input_video.mp4' # Path to your input video file
```

```
output_video_path = 'reversed_video.mp4' # Path where you want to save the reversed video
```

```
reverse_video(input_video_path, output_video_path)
```

