I have used audiopipe and opencv to solve the problem statement

To Run Detection on video:

Open main.py file and In place of videocapture place path to your video file and run main.py file
You would get a new video file containing details about the number of successful reps and unsuccessful reps and max time taken to perform a successful rep and min time taken to perform the same

```
cap = cv.VideoCapture('KneeBendVideo (1).mp4')
```

Change the filename

Code explanation :
This code is using OpenCV and MediaPipe to process a video of a person doing knee bends. The code first captures the video and sets some initial parameters like video dimensions, fourcc codec, and creates a video writer object to store processed video. The function Angle calculates the angle between three points representing the hip, knee and ankle of a person. The function calAngle retrieves the hip, knee, and ankle coordinates from the MediaPipe output and passes them to the Angle function. Then, the code initializes some variables like the initial angle, starting leg, number of repetitions, incorrect repetitions, iteration number, maximum and minimum repetition times, and a list of previous angles. The MediaPipe Pose component is initialized and a while loop runs until the video is done. In each iteration of the loop, the code reads the current video frame, runs pose estimation on it using the MediaPipe Pose component, and retrieves the hip, knee, and ankle landmarks. Then, the code calculates the angle using the calAngle function, checks if the knee bend has been completed, and updates the number of repetitions and incorrect repetitions. The processed frame is then written to the output video.