Video recording function

1. Purpose of the experiment

The dog's camera realizes the recording function.

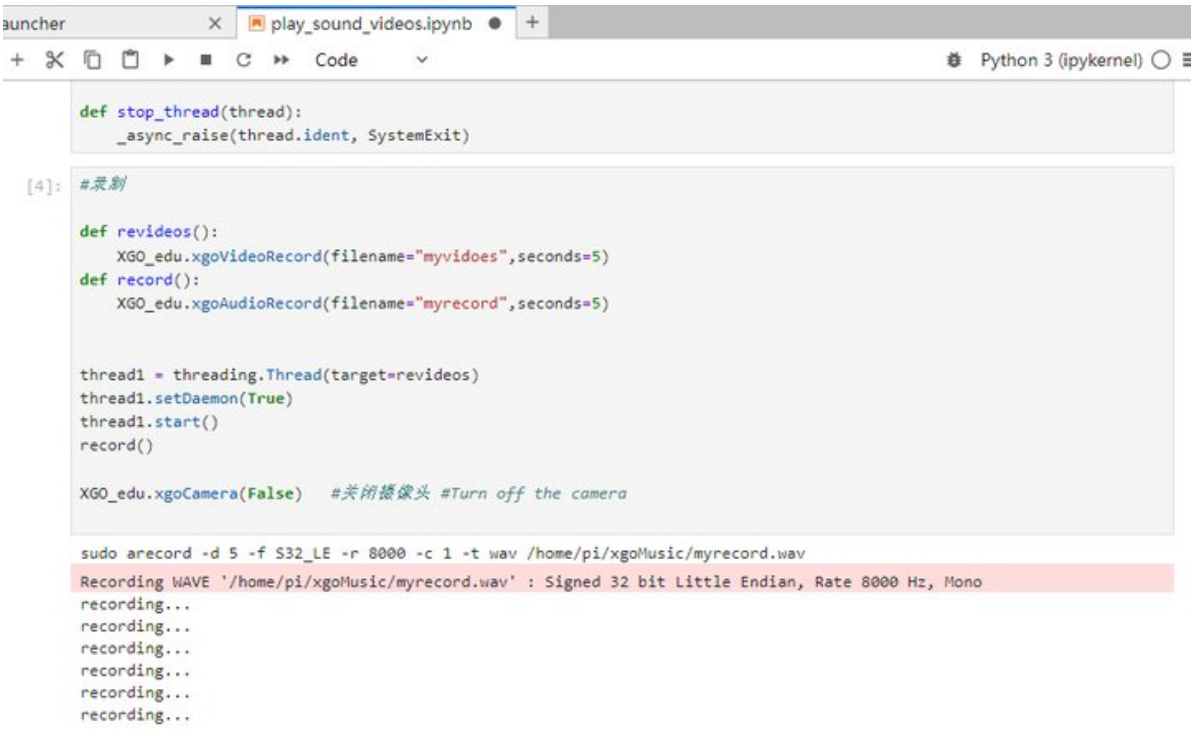
2. Experimental path source code

Enter the dog's system, end the dog program, enter "ip (ip is the dog's ip): 8888" in the browser, enter the password "yahboom"

and log in. Enter the path of **cd ~/pi/DOGZILLA_Lite_class/2.Base Control/08.Picture recording** and run **play_sound_videos.ipynb** .

3. Experimental Phenomenon

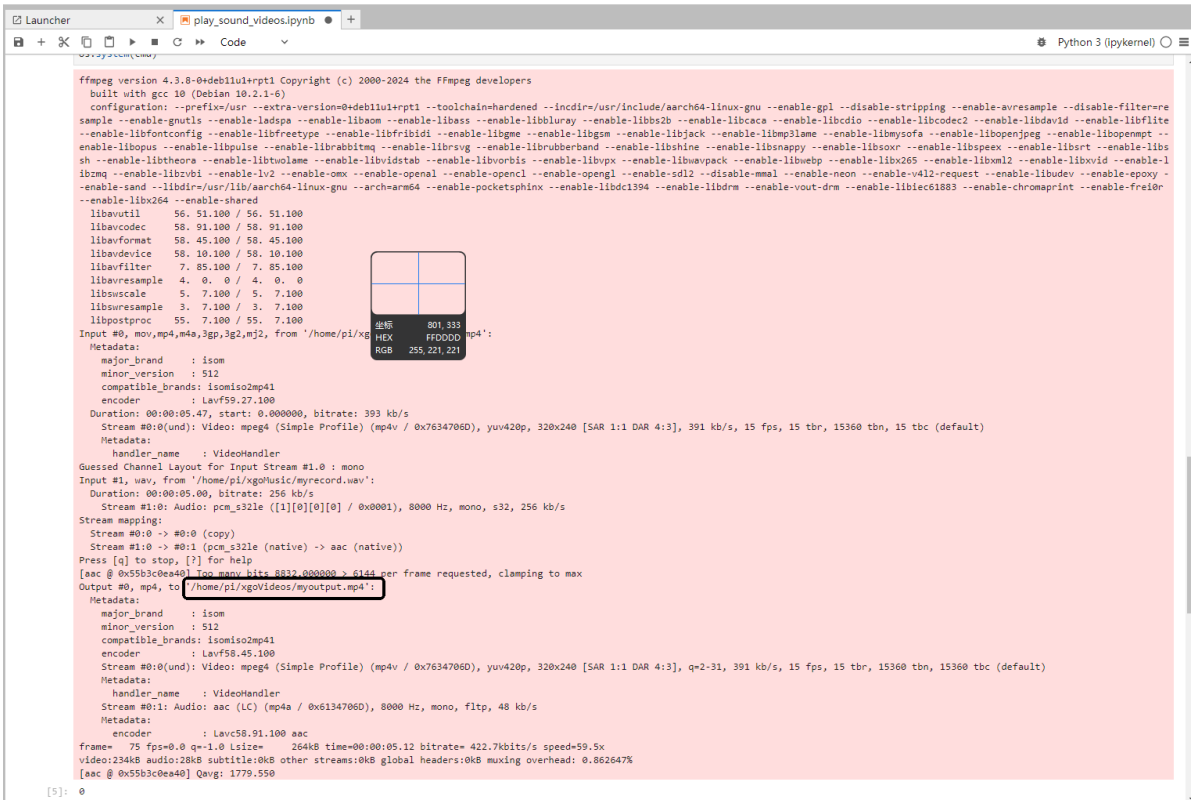
After running the source code, the dog will record video and audio for 5 seconds.



Recording completed

```
recording...
recording...
recording...
recording...
recording...
recording...
recording...
recording...
recording...
recording...
recording...
recording...
recording...
recording...
recording...
recording...
recording...
recording done
```

Then run down to combine the recorded video and audio into one video. The synthesis is successful as shown in the figure



Then run it down and play the synthesized video, and you can find that the recorded video has sound.

```
#It will play to the file/home/pi/xgoVideos
XGO_edu.xgoVideo(filename="myoutput.mp4")
```

```
/home/pi/xgoVideos/myoutput.mp4
15.0
MPlayer 1.4 (Debian), built with gcc-10 (C) 2000-2019 MPlayer Team

Playing /home/pi/xgoVideos/myoutput.mp4.
libavformat version 58.45.100 (external)
libavformat file format detected.
[mov,mp4,m4a,3gp,3g2,mj2 @ 0x7f7fe53028]Protocol name not provided, cannot determine if input is local or a network protocol, buf
fers and access patterns cannot be configured optimally without knowing the protocol
[lavf] stream 0: video (mpeg4), -vid 0
[lavf] stream 1: audio (aac), -aid 0, -alang und
Clip info:
 major_brand: isom
 minor_version: 512
 compatible_brands: isomiso2mp41
 encoder: Lavf58.45.100
Load subtitles in /home/pi/xgoVideos/
==========================================================================
Opening audio decoder: [ffmpeg] FFmpeg/libavcodec audio decoders
libavcodec version 58.91.100 (external)
AUDIO: 8000 Hz, 1 ch, floatle, 44.8 kbit/17.49% (ratio: 5596->32000)
Selected audio codec: [ffaac] afm: ffmpeg (FFmpeg AAC (MPEG-2/MPEG-4 Audio))
==========================================================================
do_connect: could not connect to socket
connect: No such file or directory
Failed to open LIRC support. You will not be able to use your remote control.
[aac @ 0x7f7f3bef28]Multiple frames in a packet.
AO: [pulse] Init failed: Connection refused
Failed to initialize audio driver 'pulse'
AO: [alsa] 48000Hz 1ch floatle (4 bytes per sample)
Video: no video
Starting playback...
A:   0.0 (00.0) of 5.1 (05.1) ??,?%
[aac @ 0x7f7f3bef28]channel element 0.0 is not allocated
A:   4.9 (04.8) of 5.1 (05.1)  0.5%


Exiting... (End of file)
```

4. Main source code analysis

1. XGO_edu.xgoVideoRecord(filename="myvidoes",seconds=5) #Function to record video
2. XGO_edu.xgoAudioRecord(filename="myrecord",seconds=5) #Function to record audio
3. XGO_edu.xgoVideo(filename="myoutput.mp4") #Function to play video For the usage of the above functions, please refer to the previous chapters for detailed understanding.