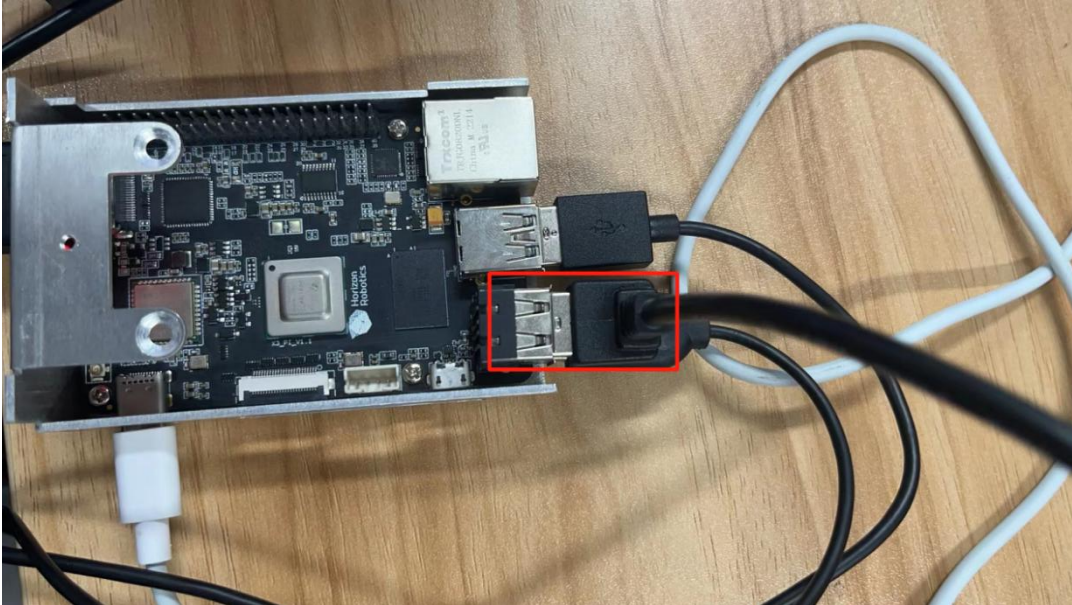## 1. Preparation before class

RDK X3 board*1, camera *1

2. Hardware connection

Plug the USB interface of the HD camera into the USB port of the RDK X3.

3.Code

After copying the file camera.py to the system of RDK X3, enter ==python3 camera.py== at the command line.

If the system prompts the camera initialization error, the device node of the camera is incorrect.

1) Plug in the camera and enter the command ls/dev/video * to see which device node the current camera is.

2) Then change the code in the box below.

```python
# V3.2.1
class Transbot_Camera(object):

    def __init__(self, video_id=8, width=640, height=480, debug=False):
        self.__debug = debug
        self.__video_id = video_id
        self.__state = False
        self.__width = width
        self.__height = height

        self.__video = cv.VideoCapture(self.__video_id)
        # success, _ = self.__video.read()
        success = self.__video.isOpened()
        if not success:
            self.__video_id = (self.__video_id + 1) % 2
            self.__video = cv.VideoCapture(self.__video_id)
            # success, _ = self.__video.read()
            success = self.__video.isOpened()
            if not success:
                if self.__debug:
                    print("---------Camera Init Error!-----------")
                return
        self.__state = True

        self.__config_camera()

        if self.__debug:
            print("---------Video%d Init OK!-----------" % self.__video_id)
```

4. Experimental results