YOLO environment construction

Note: Using the Docker container in the factory image does not require re-building the environment. The environment is already set up; simply enter Docker according to the above tutorial to use it.

1. System kernel and architecture

```
uname -a
```

```
root@raspberrypi:~# uname -a
Linux raspberrypi 6.12.25+rpt-rpi-2712 #1 SMP PREEMPT Debian 1:6.12.25-1+rpt1 (2025-04-30) aarch64 aarch64 aarch64
GNU/Linux
root@raspberrypi:~#
```

2. Preliminary preparation

```
sudo apt update
sudo apt install python3-pip -y
sudo pip install -U pip
```

3. Installing Ultralytics

```
pip3 install ultralytics
```

For more detailed instructions, please refer to this official link: [Install Ultralytics - Ultralytics YOLO Docs](#)