Enter the robot's docker container

Note: The ROS_DOMAIN_ID of the Raspberry Pi and the microROS control board need to be consistent. You can check [MicroROS Control Board Parameter Configuration] to set the microROS control board ROS_DOMAIN_ID. Check the tutorial [Connect MicroROS Agent] to determine whether the IDs are consistent.

1. Enter the robot docker

Taking the supporting Raspberry Pi as an example, enter the following command to enter the docker container.

```
./ros2_humble.sh
```

When the following interface appears, you have entered docker successfully. Now you can control the car through commands.

```
pi@raspberrypi:~ $ ./ros2_humble.sh
access control disabled, clients can connect from any host
MY_DOMAIN_ID: 20
root@raspberrypi:/#
```

It should be noted that this ID needs to be consistent with the ID configured in the MicroROS control board parameters in the previous section, so that synchronous communication can be performed to control the car. Enter the following command to test whether communication is successful.

```
ros2 node list
```

```
root@raspberrypi:/# ros2 node list
/YB_Car_Node
root@raspberrypi:/#
```

2. Enter the same docker from multiple terminals

Reopen a new terminal in the Raspberry Pi and enter the command.

```
docker ps -a
```

You can see the ID number you used to enter docker and the docker version.

```
pi@raspberrypi:~ $ docker ps -a

CONTAINER ID IMAGE

Gf0b05ce60d4 micro-ros-agent:humble "/bin/sh /micro-ros_..." 2 hours ago Up 2 hours

ef0e1b7da319 192.168.2.51:5000/ros-humble:10.14 "/bin/bash" 2 hours ago Up 2 hours

pi@raspberrypi:~ $
```

You can enter the same docker based on this ID number. Note that the ID number is different every time you enter the docker. Enter the command.

```
docker exec -it ef0e1b7da319 /bin/bash
```

```
pi@kaspberrypi:~ $ docker exec -it ef0e1b7da319 /bin/bash
MY_DOMAIN_ID: 20
root@raspberrypi:/#
```

When this screen appears, we have entered the same docker.