2. Robot keyboard control

1. Program function description

After the program is started, the robot movement can be controlled by the keyboard.

2. Start the keyboard control program

2.1 Code path

Code path:

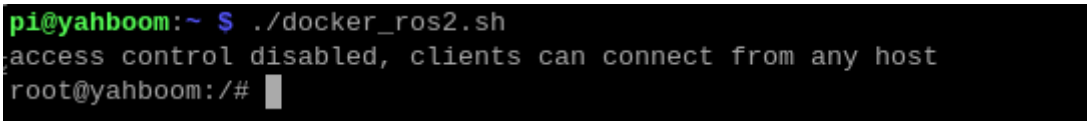
```
/root/yahboomcar_ws/src/yahboomcar_ctrl/yahboomcar_ctrl
```

2.2 Run the command

Raspberry Pi enters docker, enter in the terminal,

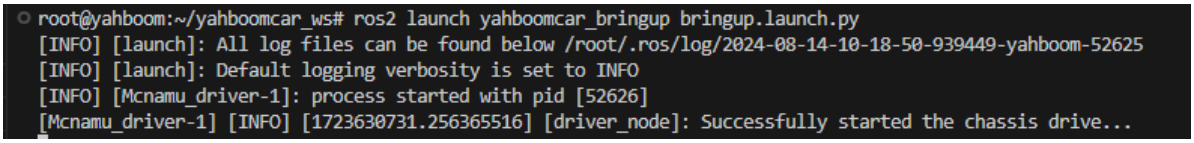
```
./docker_ros2.sh
```

The following interface appears, which means that you have successfully entered Docker.




```
ros2 launch yahboomcar_bringup bringup.launch.py
```

Start the chassis drive, as shown below.



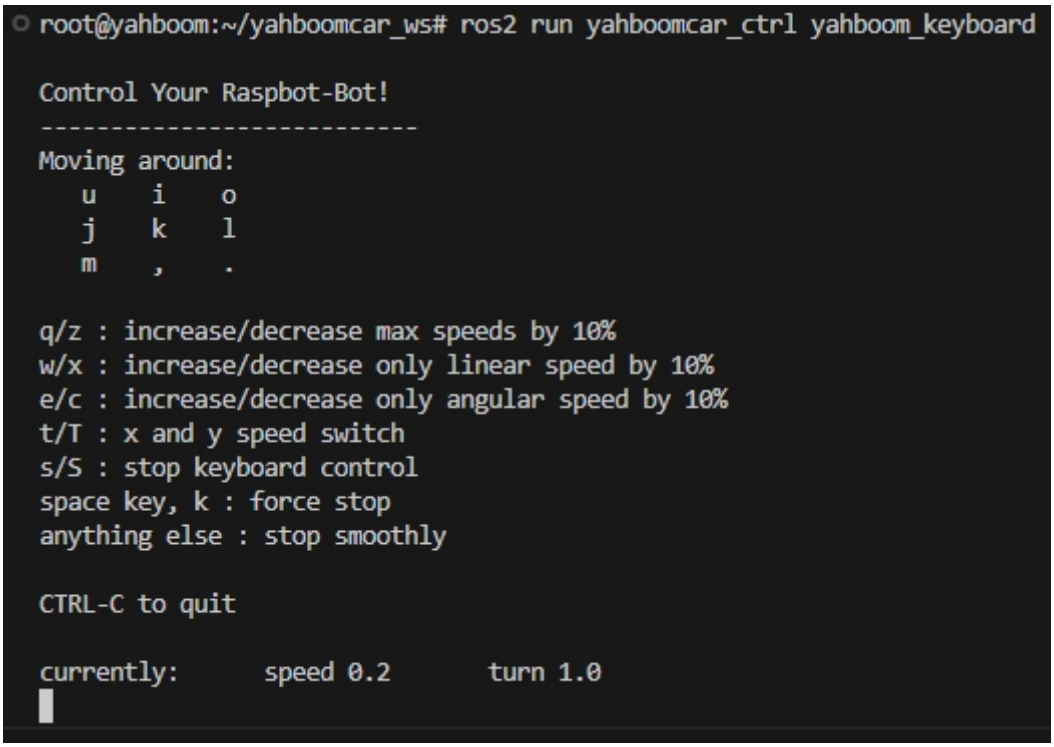
Open a new terminal and enter the same docker. Change the following da8c4f47020a to the ID displayed in the actual terminal.Open a new terminal and enter the same docker. Change the following da8c4f47020a to the ID displayed in the actual terminal.

```
docker ps
```

```
docker exec -it da8c4f47020a   /bin/bash
```

Then enter in docker,

```
ros2 run yahboomcar_ctrl yahboom_keyboard
```



The keyboard keys are described as follows:

Directional control

【i】or【I】	【linear,0】	【u】or【U】	【linear,angular】
【,】	【-linear,0】	【o】or【O】	【linear,-angular】
【j】or【J】	【0, angular】	【m】or【M】	【-linear,-angular】
【l】or【L】	【0, -angular】	【.】	【-linear,angular】

That is to say, install [i] to move forward, press [,] to move backward, press [l] to rotate right, press [j] to rotate left, and so on.

Speed control

Key	Speed changes	Key	Speed changes
【q】	10% increase in both linear and angular velocities	【z】	10% reduction in both linear and angular velocities
【w】	Only 10% increase in line speed	【x】	Only 10% reduction in line speed
【e】	Only 10% increase in angular velocity	【c】	Only 10% reduction in angular velocity
【t】	Linear speed X/Y direction switching	【s】	Stop keyboard control