7.Movelt scene design

1. RVIZ simulation motion of robotic arm

1.1 Start roscore

- If you are using Jetson Orin NX/Jetson Orin Nano board. You need to enter the Docker environment using the following command.

```
sh ~/start_docker.sh
roscore
```

- If you are using Jetson Nano board. You need to enter the following command directly.

```
roscore
```

1.2 Start simulation

Open a new terminal.

- If you are using Jetson Orin NX/Jetson Orin Nano board. You need to enter the Docker environment using the following command.

```
sh ~/start_docker.sh
```

- If you are using Jetson Nano board. You need to enter the following command directly.

```
roslaunch jetcobot_moveit jetcobot_moveit.launch
```

2. Drive real robotic arm

Open a new terminal.

- If you are using Jetson Orin NX/Jetson Orin Nano board. You need to enter the Docker environment using the following command.

```
sh ~/start_docker.sh
```

- If you are using Jetson Orin NX/Jetson Orin Nano board. You need to enter the Docker environment using the following command.

```
rosrun jetcobot_moveit sync_plan.py
```

Note: After the program driving the real machine is running, the robotic arm will follow the movement of the simulated robot.

Please be careful not to place other objects around to avoid being hit by the robotic arm.

3. Run program

Open a new terminal.

- If you are using Jetson Orin NX/Jetson Orin Nano board. You need to enter the Docker environment using the following command.

```
sh ~/start_docker.sh
```

- If you are using Jetson Nano board. You need to enter the following command directly.

```
rosrun jetcobot_moveit 06_set_Scene.py
```

Code path：~/jetcobot_ws/src/jetcobot_moveit/scripts/06_set_Scene.py

Experimental phenomenon: Display a scene in rviz where the robotic arm performs simulated actions of moving building blocks.