

### **Implementasi simulasi PRM dengan Matplotlib**

```
cd ~/catkin_ws/src
catkin_create_pkg prm_ros rospy std_msgs geometry_msgs
cd prm_ros
mkdir scripts config launch
cd scripts
touch prm.py
chmod +x prm.py
cd ..
cd config
touch params.yaml
cd ..
cd launch
touch prm.launch
cd ~/catkin_ws
catkin_make
source devel/setup.bash
roslaunch prm_ros prm.launch
```

```
cd ~/catkin_ws/src
catkin_create_pkg prm_ros rospy std_msgs geometry_msgs
```

```
sudo apt update
sudo apt install python3-catkin-tools python3-osrf-pycommon
```

### **Probabilistic Roadmap**

```
cd ~/catkin_ws/src
git clone https://github.com/nishadg246/Probabilistic-Roadmap.git
cd ~/catkin_ws
catkin_make
source devel/setup.bash
- Terminal lain
roscore
- Terminal awal
roslaunch rrt-planning rrt
- Terminal lain
roslaunch rviz rviz
```

### **RRT ROS**

```
cd ~/catkin_ws/src
git clone https://github.com/malintha/rrt-ros.git
```

```
cd ~/catkin_ws
catkin_make
source devel/setup.bash
echo "source ~/catkin_ws/devel/setup.bash" >> ~/.bashrc
source ~/.bashrc
- Terminal lain
roscore
- Terminal awal
roslaunch rrt-planning rrt
- Terminal lain
roslaunch rviz rviz
```