Introduction to ROS

Setting Up Your ROS Workspace
Go to http://wiki.ros.org/catkin/Tutorials/create_a_workspace. Select “indigo”. Follow the instructions to create and configure your catkin_ws.

Creating a ROS Package
Create a ROS package: http://wiki.ros.org/ROS/Tutorials/CreatingPackage. When you run “catkin_create_pkg”, use the -m option:

```
    catkin_create_pkg -m [your name] [pkg name] roscpp rospy std_msgs
```

ROS “Hello World”
Now you will create basic publisher and subscriber nodes:
Got to http://wiki.ros.org/ROS/Tutorials/WritingPublisherSubscriber%28python%29 (Python) OR to http://wiki.ros.org/ROS/Tutorials/WritingPublisherSubscriber%28c%2B%2B%29 (C/C++)

Running Nodes
Go to http://wiki.ros.org/ROS/Tutorials/ExaminingPublisherSubscriber to run your nodes. Experiment with them.

• What happens if you run “rostopic list”?
• How about “rostopic hz /chatter”?
• What happens if you [CTRL]-C the publisher while the subscriber is still running?
• What if you shut down the roscore while the other nodes are running?