

**What is the first command you must run in ROS?**

roscore: roscore is a collection of nodes and programs, the prereqs for ros systems. Roscore needs to be run first in order for ros nodes to be able to communicate

**What is the command to run the Turtlesim simulator?**

roslaunch turtlesim \_\_\_\_\_ (fill in with the application you want to run in the package)

**What is the command to find the list of all ROS nodes?**

roslaunch list

**What is the command to find the list of all ROS topics?**

rostopic list

**What is the topic that tells about the position of the turtle?**

turtle1/pose

To find more info about it rostopic info /turtle1/pose

**What is the topic that sends command to the turtle to make it move?**

turtle1/cmd\_vel

Use roslaunch turtlesim turtlebot\_teleop\_key, a node that publishes cmd\_vel topic based off arrow keys to make the turtle move

**What is the command that tells you information about the topic about velocity?**

rostopic info /turtle1/cmd\_vel

**What is the node used to publish velocity commands to the turtle?**

The node is /turtlesim

rostopic pub [topic] [msg\_type] [args]

**What is the node used to subscribe to velocity commands to the turtle?**

The node is /turtlesim

**What is the command that allows to see the type of message for velocity topic?**

rostopic type /turtle1/cmd\_vel

**What is the content of the velocity message? Explain its content.**

Contains linear and angular velocities in the x, y, z coordinates

**What is the content of the position message? Explain its content**

contains the x and y positions and theta for orientation. Linear and angular velocities are also calculated.