



eYRC 2021-22: Agri Bot (AB)

list

- `rostopic list` returns a list of all topics currently subscribed to and published.
- Let's see this command's actual output. In a new terminal start the roscore:

```
roscore
```



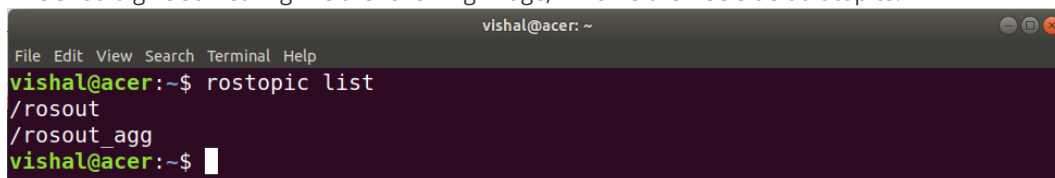
Note: Do not close this terminal, otherwise you won't be able to communicate with the rosmaster while executing some of its features.

- And in another terminal, run:

```
rostopic list
```



This should give something like the following image, which is the ROS's default topics.



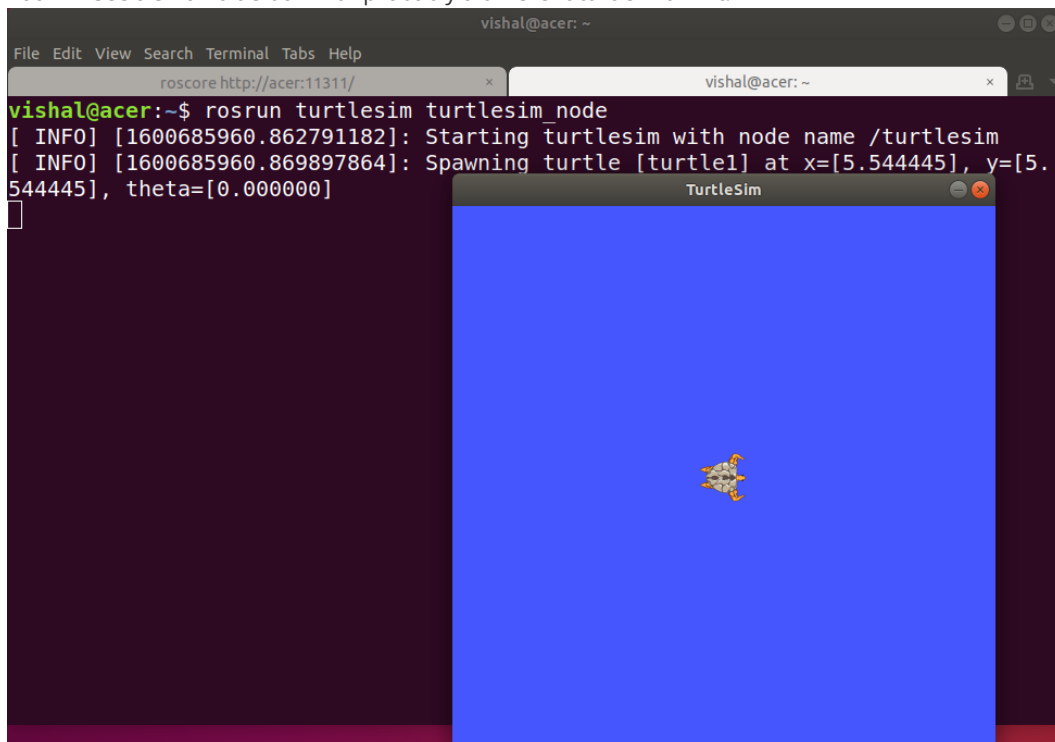
```
vishal@acer: ~  
File Edit View Search Terminal Help  
vishal@acer:~$ rostopic list  
/rosout  
/rosout_agg  
vishal@acer:~$
```

- For this tutorial, we will also use turtlesim. Please run in a new terminal:

```
roslaunch turtlesim turtlesim_node
```

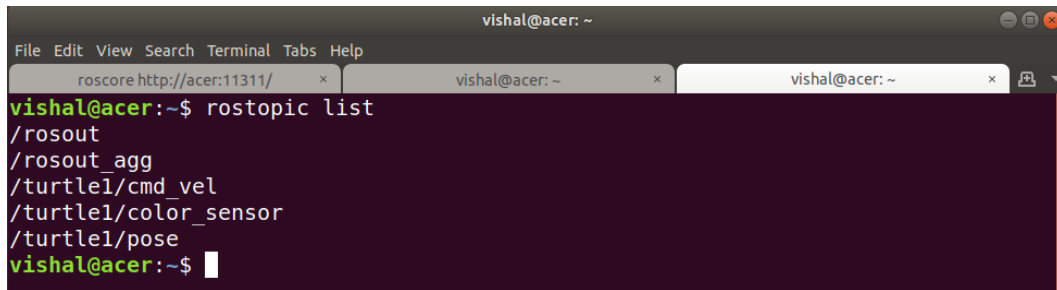


You will see a small blue box with probably a different turtle within it.



```
vishal@acer: ~  
File Edit View Search Terminal Tabs Help  
roscore http://acer:11311/  
vishal@acer:~$ roslaunch turtlesim turtlesim_node  
[ INFO] [1600685960.862791182]: Starting turtlesim with node name /turtlesim  
[ INFO] [1600685960.869897864]: Spawning turtle [turtle1] at x=[5.544445], y=[5.544445], theta=[0.000000]  
[ ]  
TurtleSim
```

- Now, check again the `rostopic list` command in another terminal and observe the topics being subscribed or published.

A screenshot of a terminal window titled 'vishal@acer: ~'. The terminal shows the command 'rostopic list' being executed, which lists several ROS topics: '/rosout', '/rosout_agg', '/turtle1/cmd_vel', '/turtle1/color_sensor', and '/turtle1/pose'. The prompt 'vishal@acer:~\$' is visible at the bottom of the terminal output.

```
vishal@acer: ~  
File Edit View Search Terminal Tabs Help  
roscore http://acer:11311/ x vishal@acer: ~ x vishal@acer: ~ x  
vishal@acer:~$ rostopic list  
/rosout  
/rosout_agg  
/turtle1/cmd_vel  
/turtle1/color_sensor  
/turtle1/pose  
vishal@acer:~$
```

Note: You can know more about these listed topics, by simply adding arguments as a suffix to `rostopic list`. And to know which arguments does what type `rostopic list --help`. Go ahead and experiment.

