ROS Tutorial #7:

Note, this tutorial assumes that you have just finished tutorial #6. But, the tutorial #7 initial instructions are not quite correct, as tutorial #6 assumes you are running two copies of the turtle, while tutorial #7 assumes a single turtle. So, to set up #7 properly, do this:

- Open a new terminal
- cd ~/catkin_ws
- source devel/setup.bash
- roscore &   % start the ross master, the
- rosrun turtlesim turtlesim_node &   % start the turtlesim node, popping up a window
- rosrun turtlesim turtle_teleop_key   % start the keyboard logger

Now start the steps of the beginner tutorial #6.
- **2.1:** rosservice type /clear   % what arguments does the /clear service require?
- **2.2:** rosservice call /clear   % call turtlesim /clear, which erases any paths
- **2.3:** rosservice type /spawn | rossrv show
    - This is "linux speak" to string together two commands
    - rosservice type /spawn returns   "turtlesim/spawn"
    - the "| rossrv show" bit in effect calls: rossrv show turtlesim/spawn
    - this returns the message structure of the spawn service in the turtlesim node
- 2.4: rosservice call /spawn 2 2 0.2 ""
    - Spawn a new robot in the window at location (x=2,y=2,theta=0.2) with no name

The next part of tutorial #7, part 3, deals with parameters in ROS, using the rosparam function
- **3.1:**   rosparam list   % list the available parameters
- **3.2:**   rosparam set /turtlesim/background_r 150
    - Note, the tutorial is ***wrong.*** The tutorial does properly prepend the "/turtlesim" portion of the name. This probably comes from the way that ROS melodic works versues
- **3.2 (continued):** rosparam get /turtlesim/background_g
    - Again, the tutorial is ***wrong,*** forgetting to prepend the "/turtlesim" portion
- **3.2 (continued):** rosparam get /
    - The tutorial function call is correct, but ROS melodic returns a different format that that described in the tutorial
- **3.3:**   rosparam dump params.yaml
- **3.3 (continued):**   rosparam load params.yml copy
- **3.3 (continued):**   rosparam get /copy/turtlesim/background_b
    - The tutorial is ***wrong .*** The turtlesim node needs to be specified.