Lab 2 Proof of Completion
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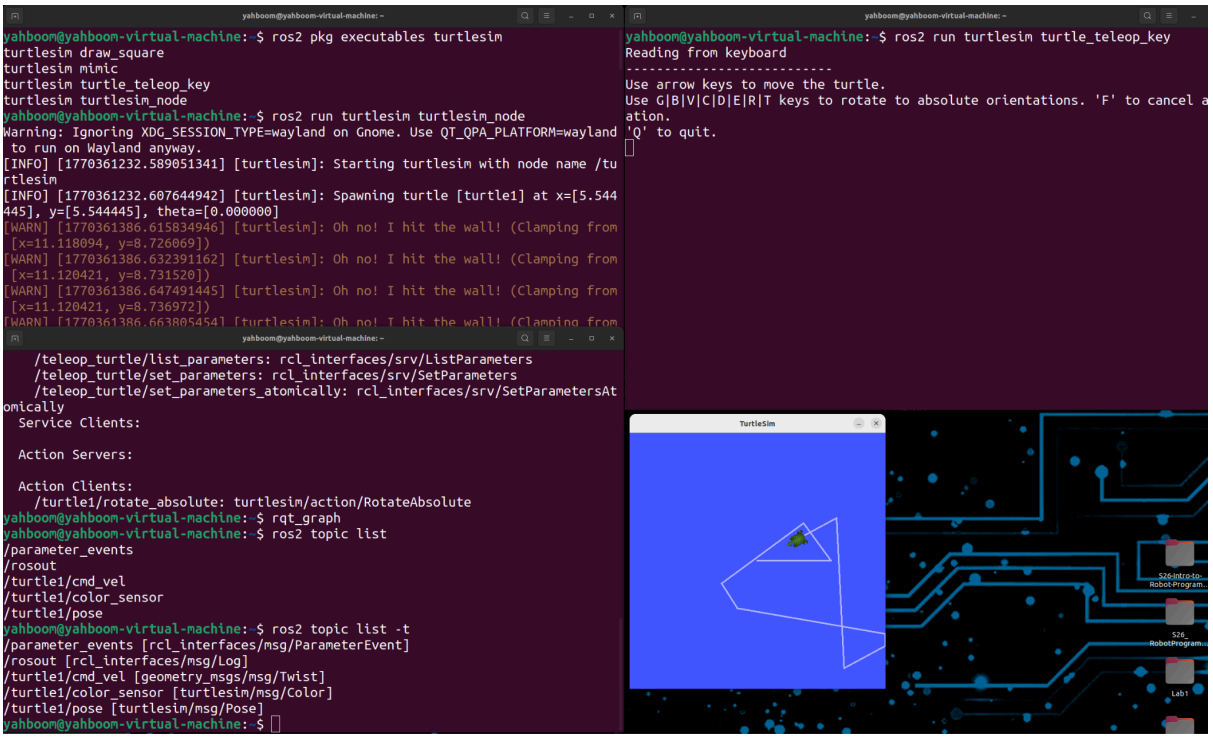
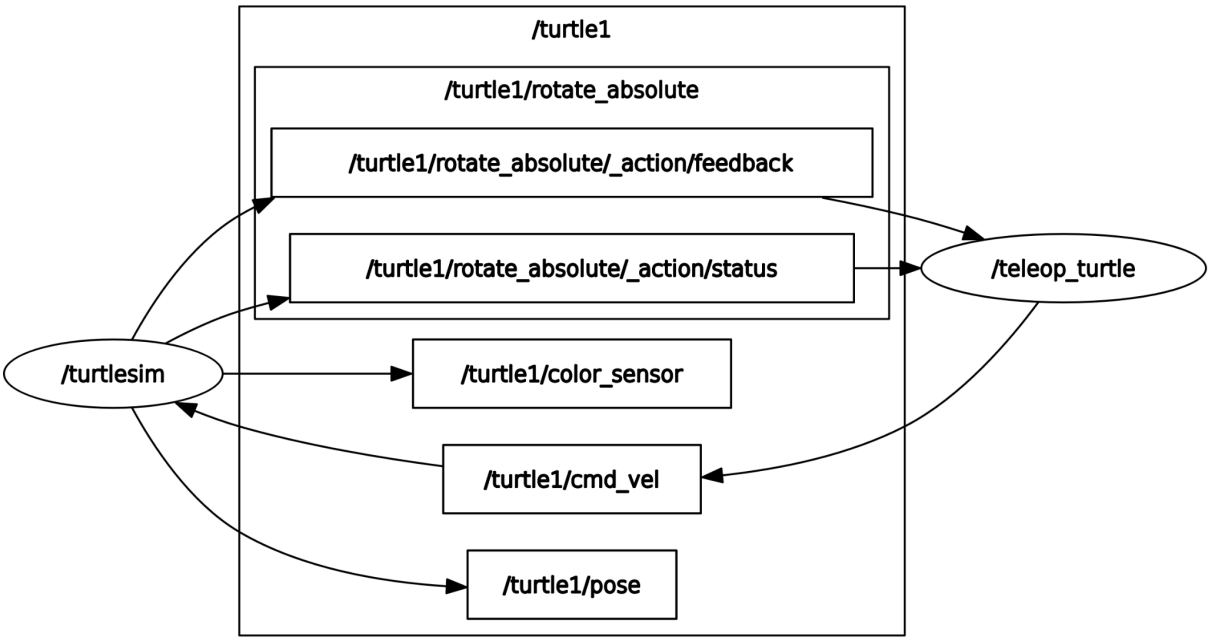
Task#2 Starting nodes



Task#2_step#7



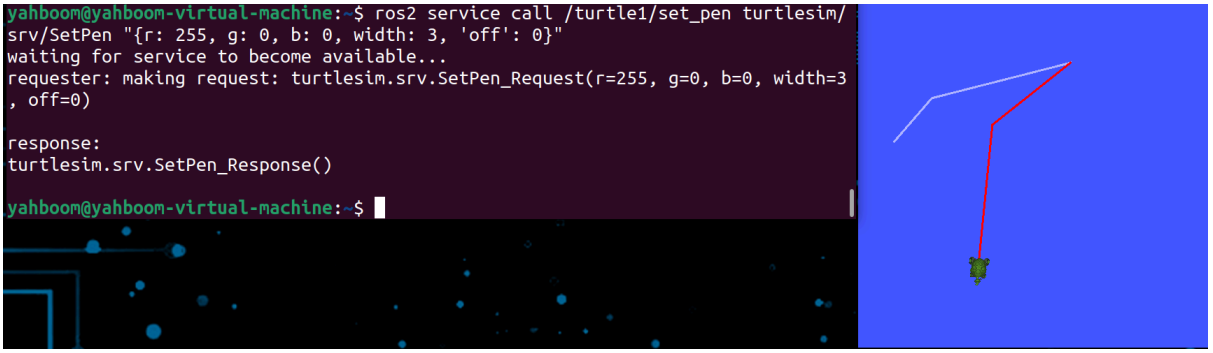
Task#2_step#21

```
yahboom@yahboom-virtual-machine:~$ ros2 topic info /turtle1/pose
Type: turtlesim/msg/Pose
Publisher count: 1
Subscription count: 0
yahboom@yahboom-virtual-machine:~$ ros2 interface show turtlesim/msg/Pose
float32 x
float32 y
float32 theta

float32 linear_velocity
float32 angular_velocity
yahboom@yahboom-virtual-machine:~$ ros2 topic echo /turtle1/pose
x: 7.0591936111450195
y: 6.9968414306640625
theta: -0.7791852951049805
linear_velocity: 0.0
angular_velocity: 0.0
---
```

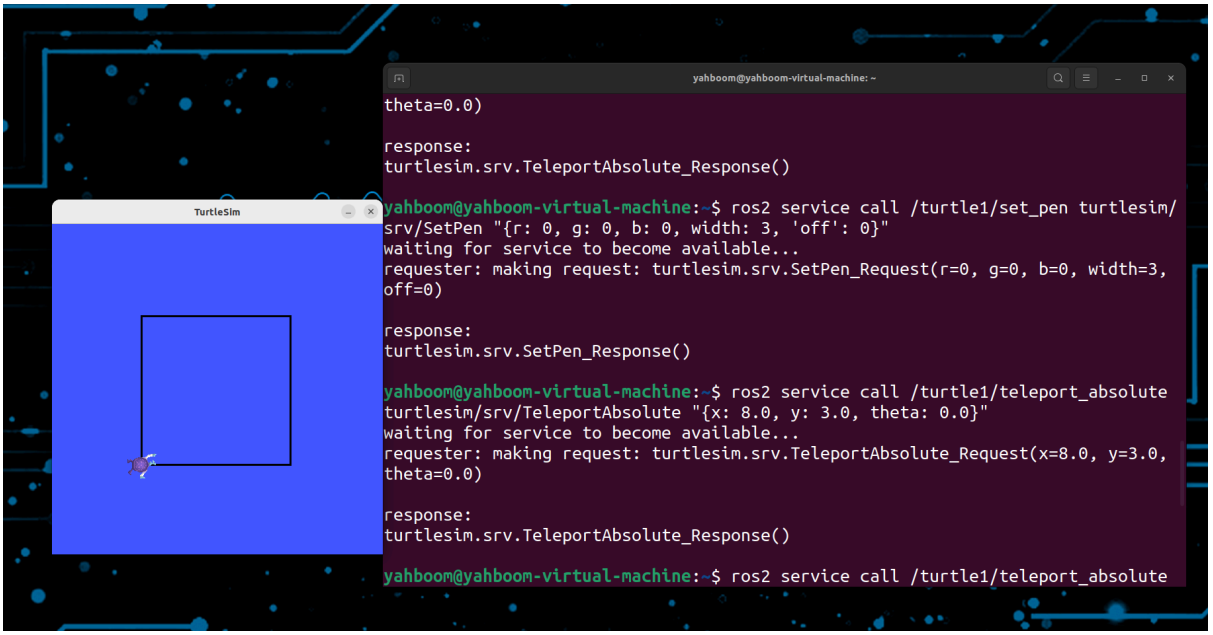
Task#2_step#25

Task#2_services challenge



Task#2_action_step#8

Task#3_square_drawing



To prevent unwanted lines connecting the center origin to the shape, I implemented a "pen-up/pen-down" logic. I first disabled the pen trace by calling `/turtle1/set_pen` with the parameter `off: 1` and moved the turtle to the starting vertex (3, 3) using `/turtle1/teleport_absolute`. After re-enabling the pen (`off: 0`), I sequentially teleported the turtle to coordinates (8, 3), (8, 8), (3, 8), and finally returned to (3, 3), which allows me to draw a clean and closed square.