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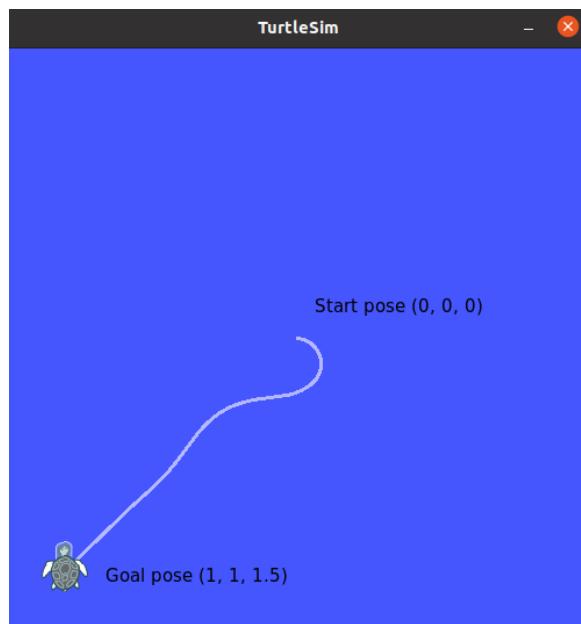
## ASSIGNMENT TWO: MOVING TO A POSE

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### Task 1:

Create a ROS2 node that will receive a request from command line over a ROS topic asking the turtle in the turtlesim simulator to move to a certain Pose in 2D. The desired pose will be sent via terminal command as arguments ( $x, y$  and  $\theta$  in radians), i.e.:

```
ros2 topic pub topic_goal
```



The ROS2 node will send the command Twist velocity to the turtle simulator that will keep tracking of the current Pose of the turtle to apply a proportional feedback control to let the robot moves to the required pose.

### Task 2:

Apply the same concept of the previous task to simulate the movement of a Turtlebot3 in Gazebo simulator to reach a certain goal pose considering the differential wheel kinematics.

### Task 3:

Record a video for the two mentioned tasks and upload them to google classroom.