

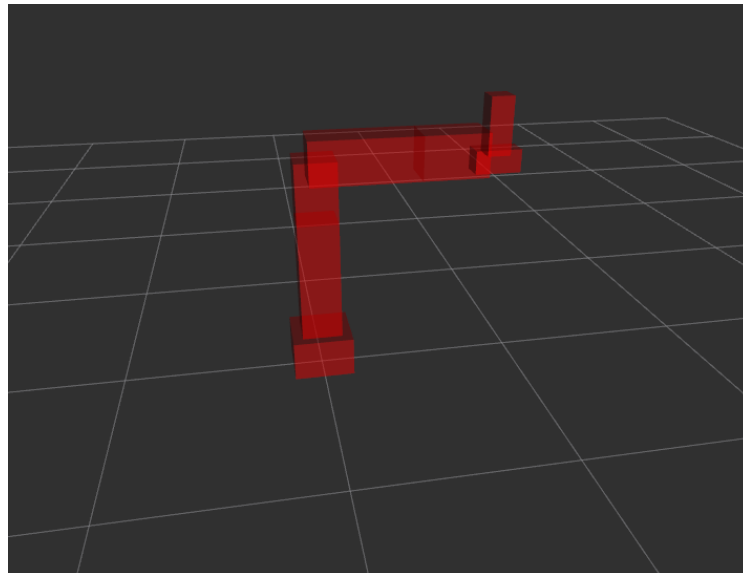
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Link Sizes :

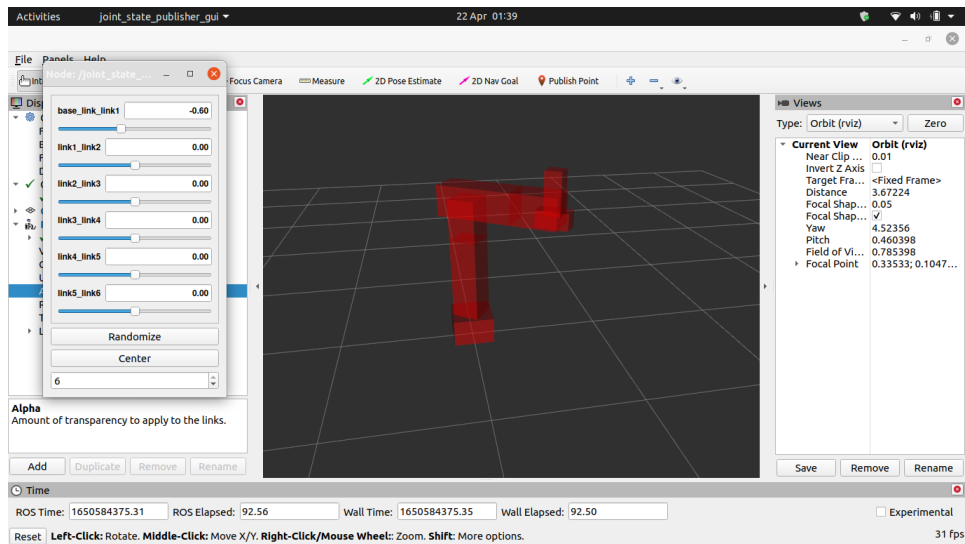
Name	X	Y	Z
Base_link	0.3	0.3	0.2
Link_1	0.2	0.2	0.6
Link_2	0.2	0.2	0.3
Link_3	0.5	0.2	0.2
Link_4	0.3	0.2	0.2
Link_5	0.2	0.1	0.1
Link_6	0.1	0.1	0.25

Robot :

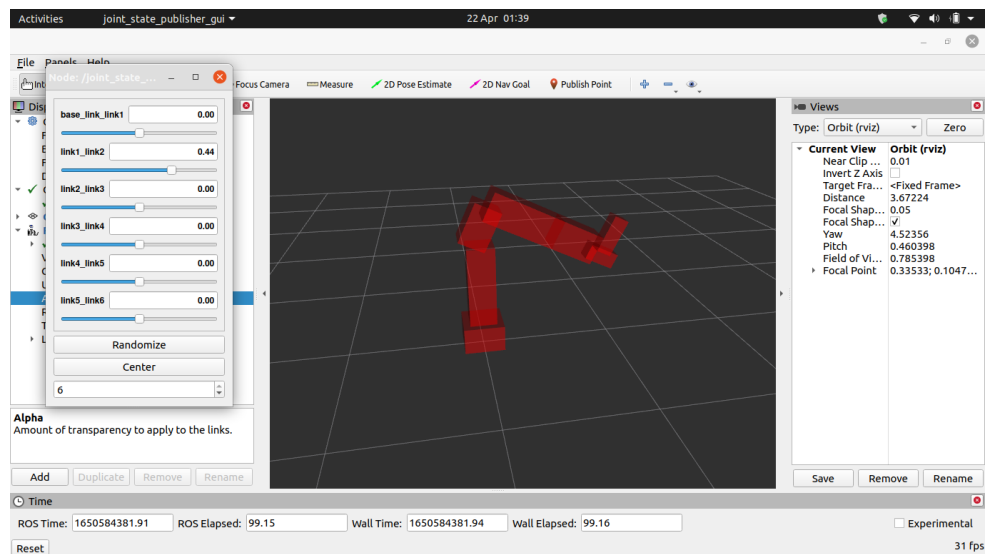


Joint Movement :

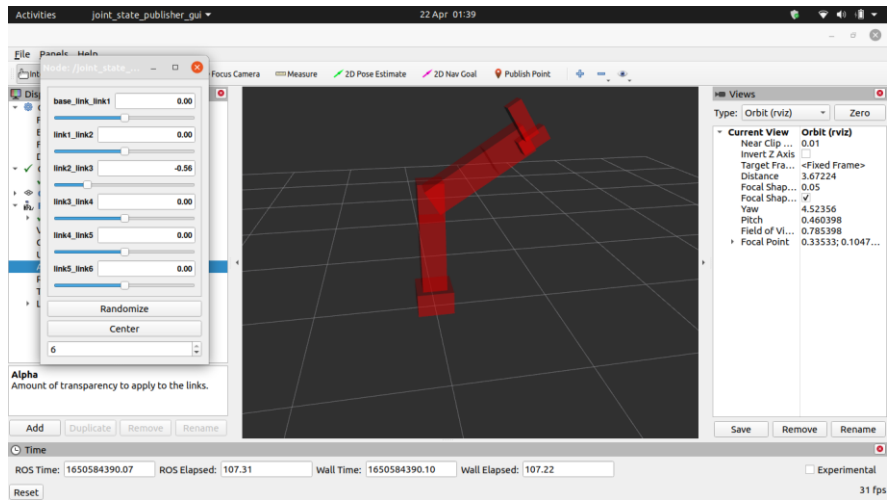
First Joint :



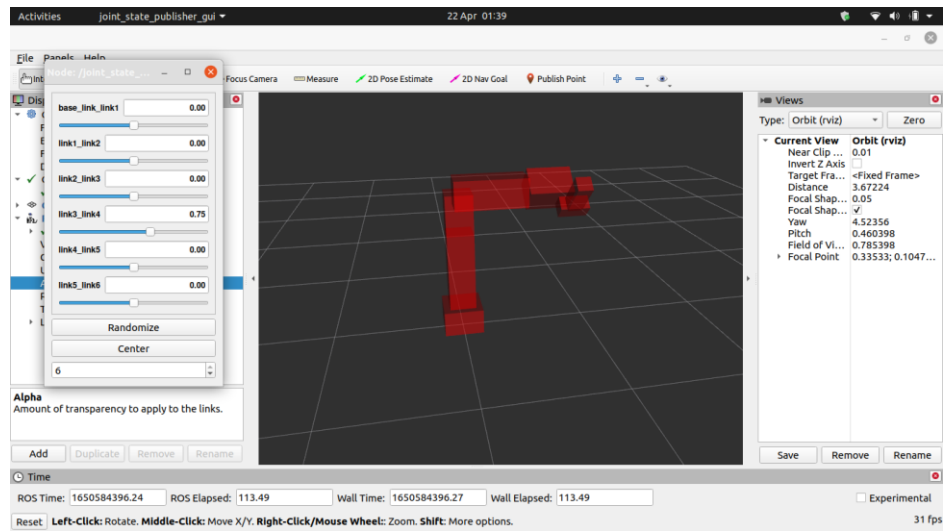
Second Joint :



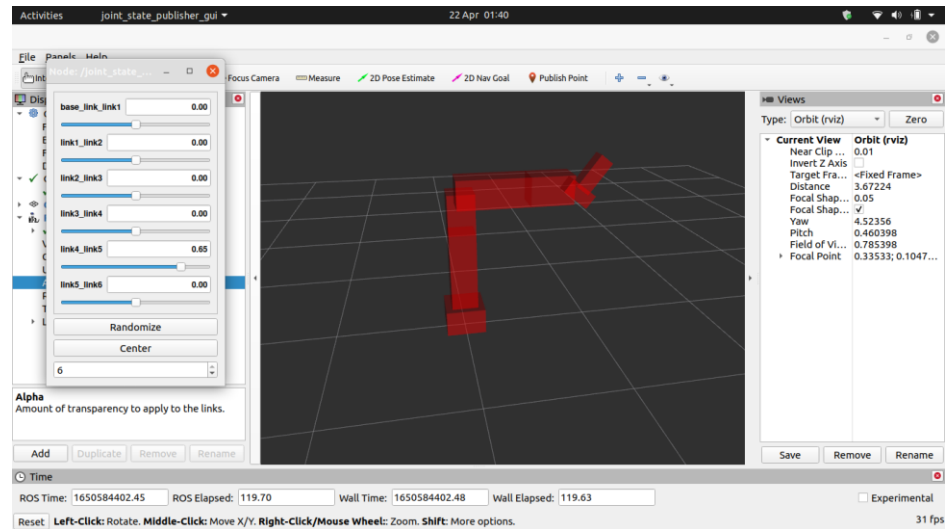
Third Joint :



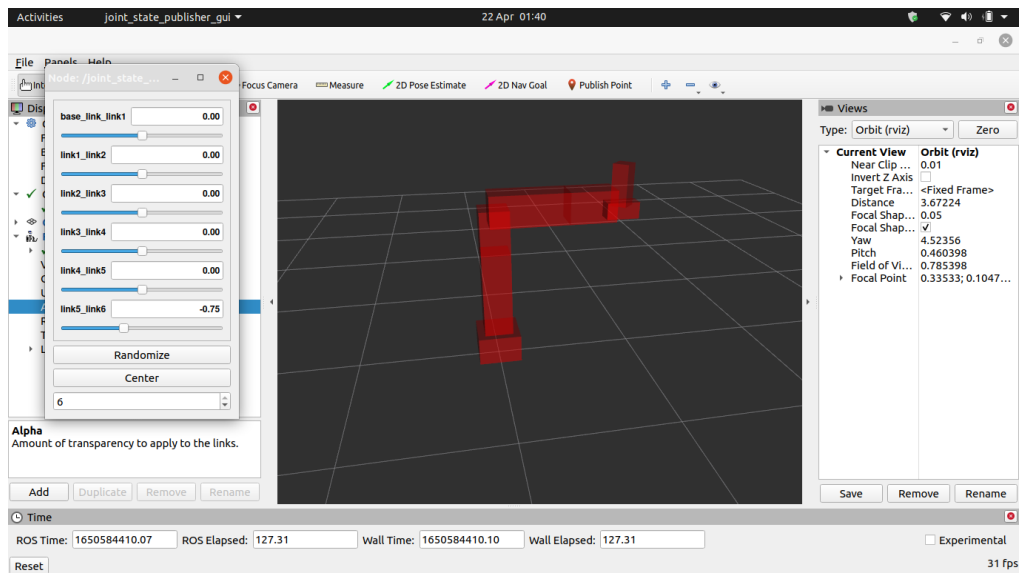
Fourth Joint :



Fifth Joint :



Sixth Joint :

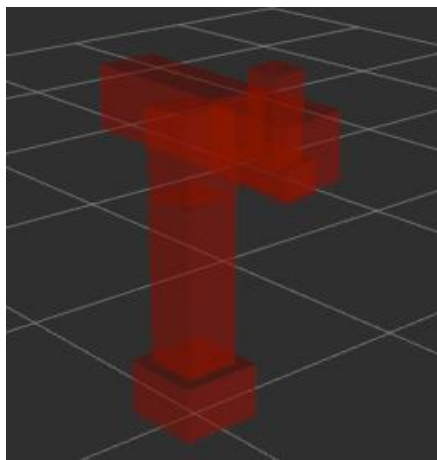


Move It :

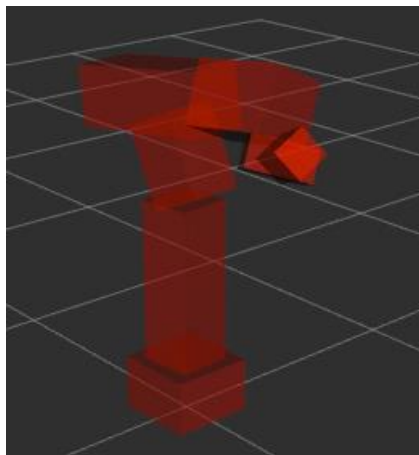
The move it configuration (Package) that was made by the move it setup assistant allowed us to move the robot and plan its path or trajectory by using either Rviz or the python File

The python file that we coded moves the robot to a specified point that we determine in the code

Before :



After :

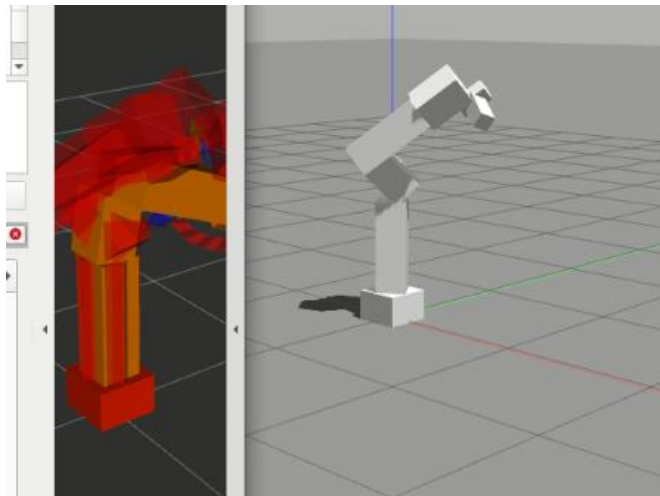


Gazebo Configurations :

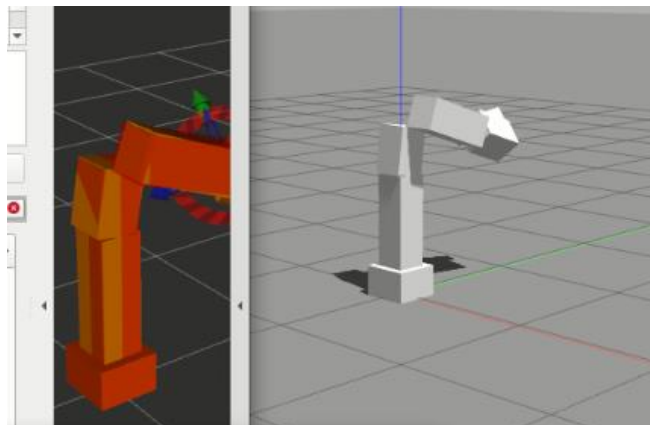
After using the move it setup assistant we were able to deduce a urdf that we can use to operate on Gazebo

After Adjusting our controller and adjusting the configuration and launch files generated by the setup assistant we were able to launch both Rviz and Gazebo Together and We were able to make the both move the same movement

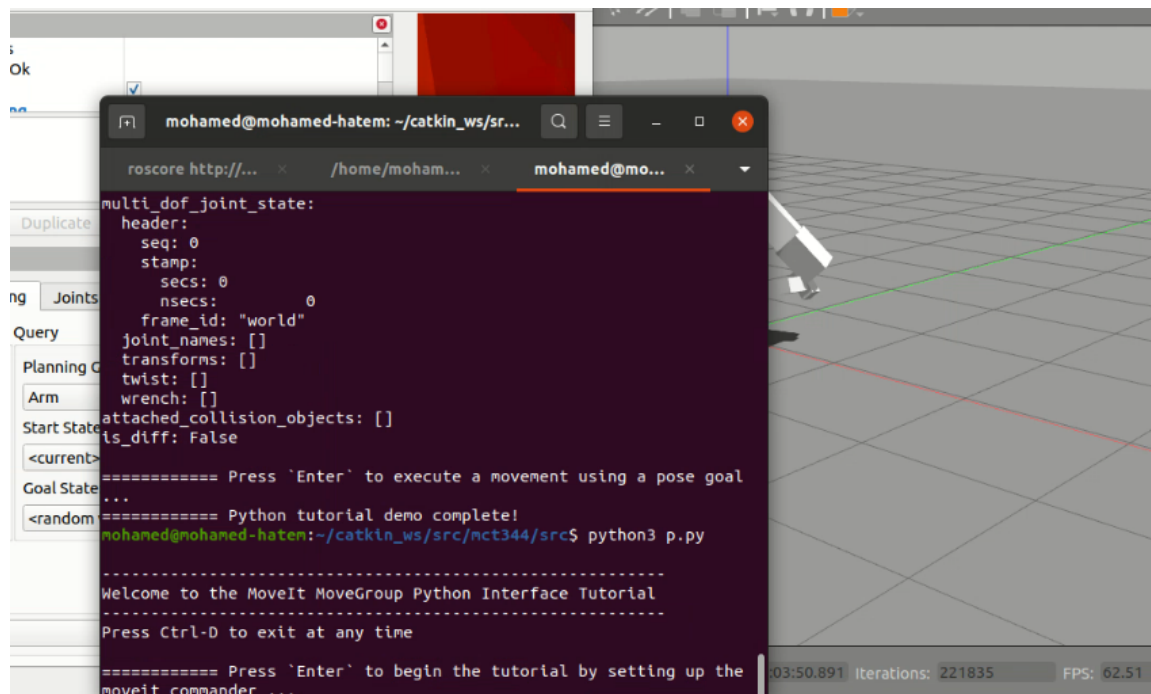
Before :



After :



And by using the same python file we used when we were working on Rviz alone
We could move the robot to the desired point



Block Diagram :

Move group in move it plan the trajectory and give joint trajectory to every joint and go to the position controller and the controller converts it to setpoint for every joint and there is a feedback from the joint state controller

