Readme

Forward Kinematics and Validation:

- Run the python file named Forward_kinematics to get the final transformation matrices and also the validation matrices.
- To get the validation matrix for different configurations change the value in lines 111-115.

Inverse Kinematics and Validation:

- Run the python file named inverse_kinematics to get the Jacobian and the inverse kinematics plot for the system.
- Also make sure to install lambidfy library before running the code.

Package:

- The package is named human_gripper.
- Run debug.launch.py for spawning the robot onto gazebo for better results.
- Run ArmController.py to control the arm using basic keyboard commands.
- To turn on the proportional controller run python3 ProportionalController.py.
- To make the arm play rock, paper and scissor with the system, run the file RPS.py using python3 RPS.py in the src/ folder of the package.