Mechanical Engineering

(INTN125)

Fall 2021

Project Demonstration

Report

Students:

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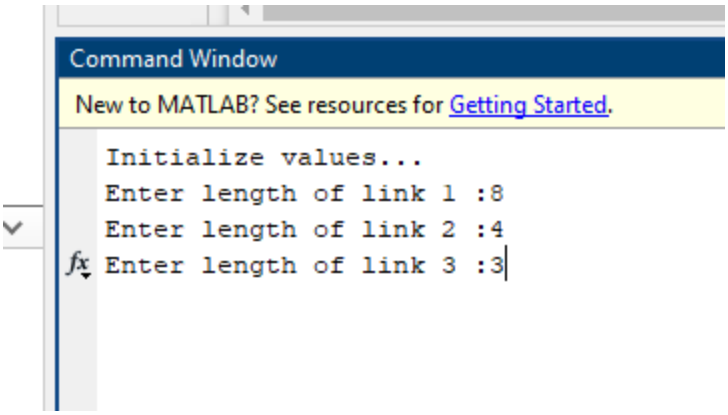
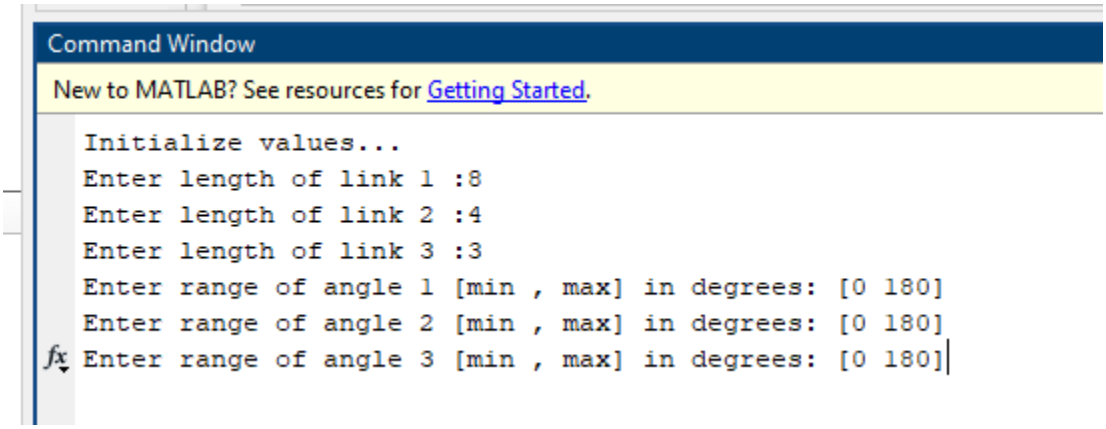
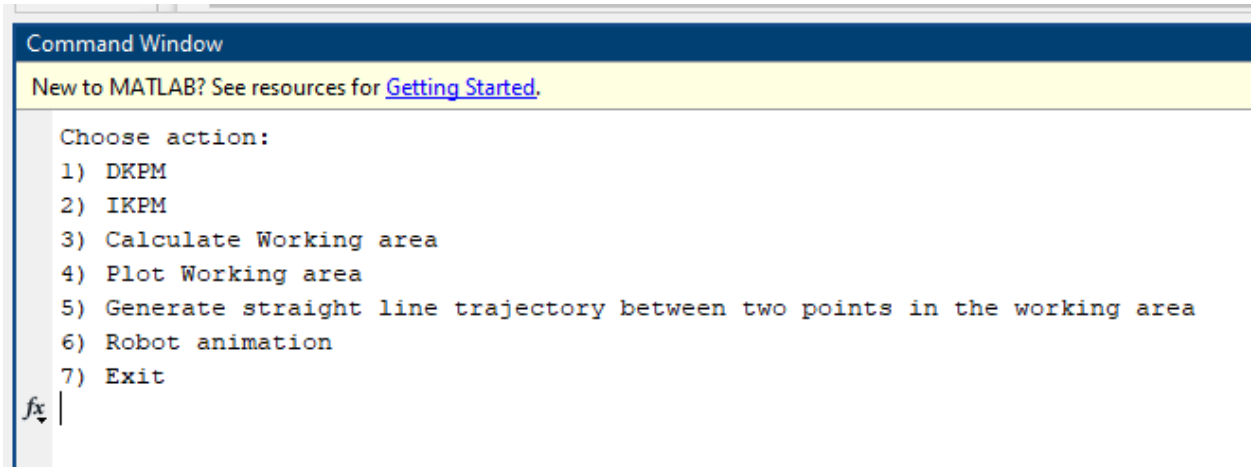


Enter lengths of the arm links (links 1,2, and 3)

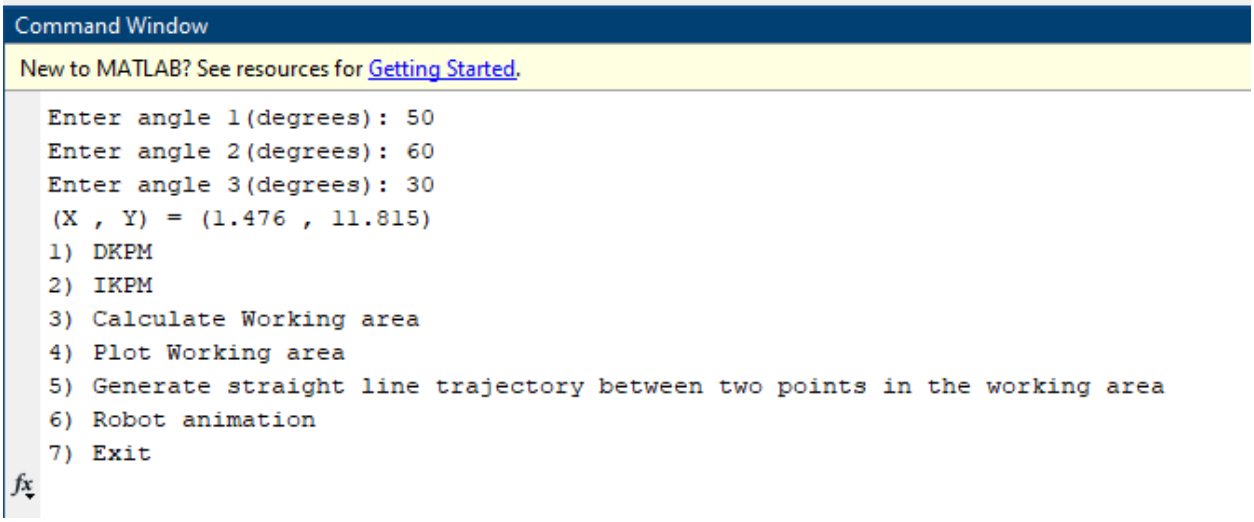


Enter range of angles in the format shown



Choose from menu the action you want

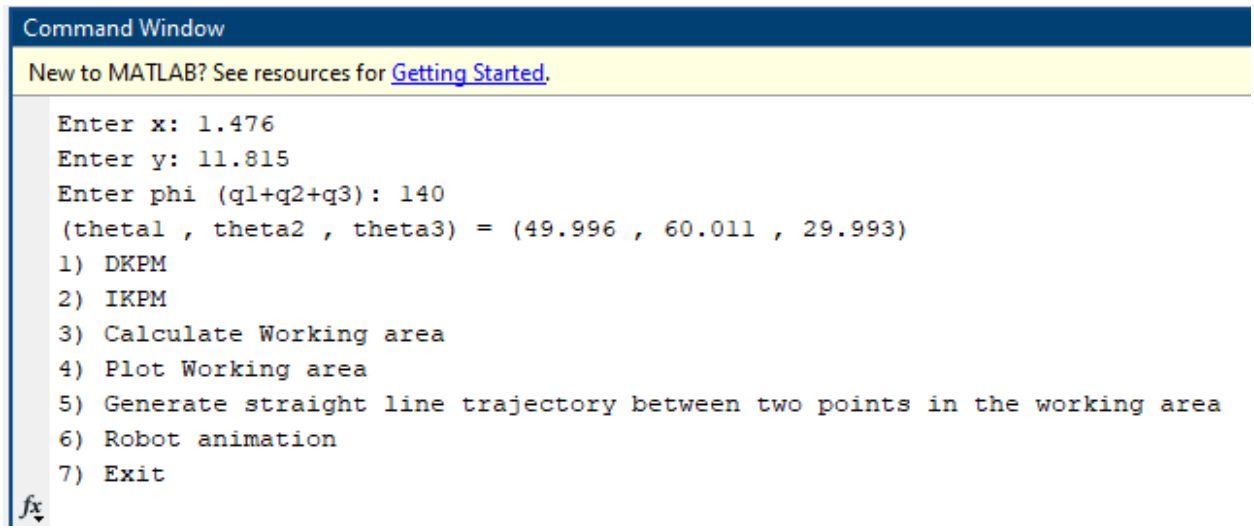
Action 1 (DKPM)



Enter angles 1,2 and 3 and the X, Y coordinates will be printed out

You will then be returned to the menu

Action 2 (IKPM)

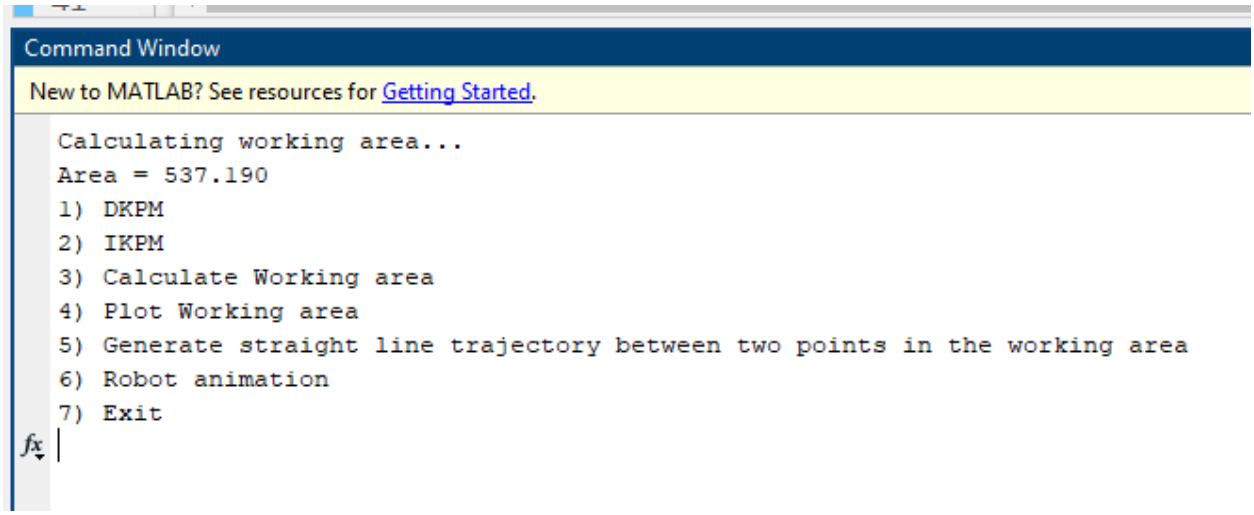


Enter X, Y and orientation(phi) then theta1, theta2, theta3 will be printed.

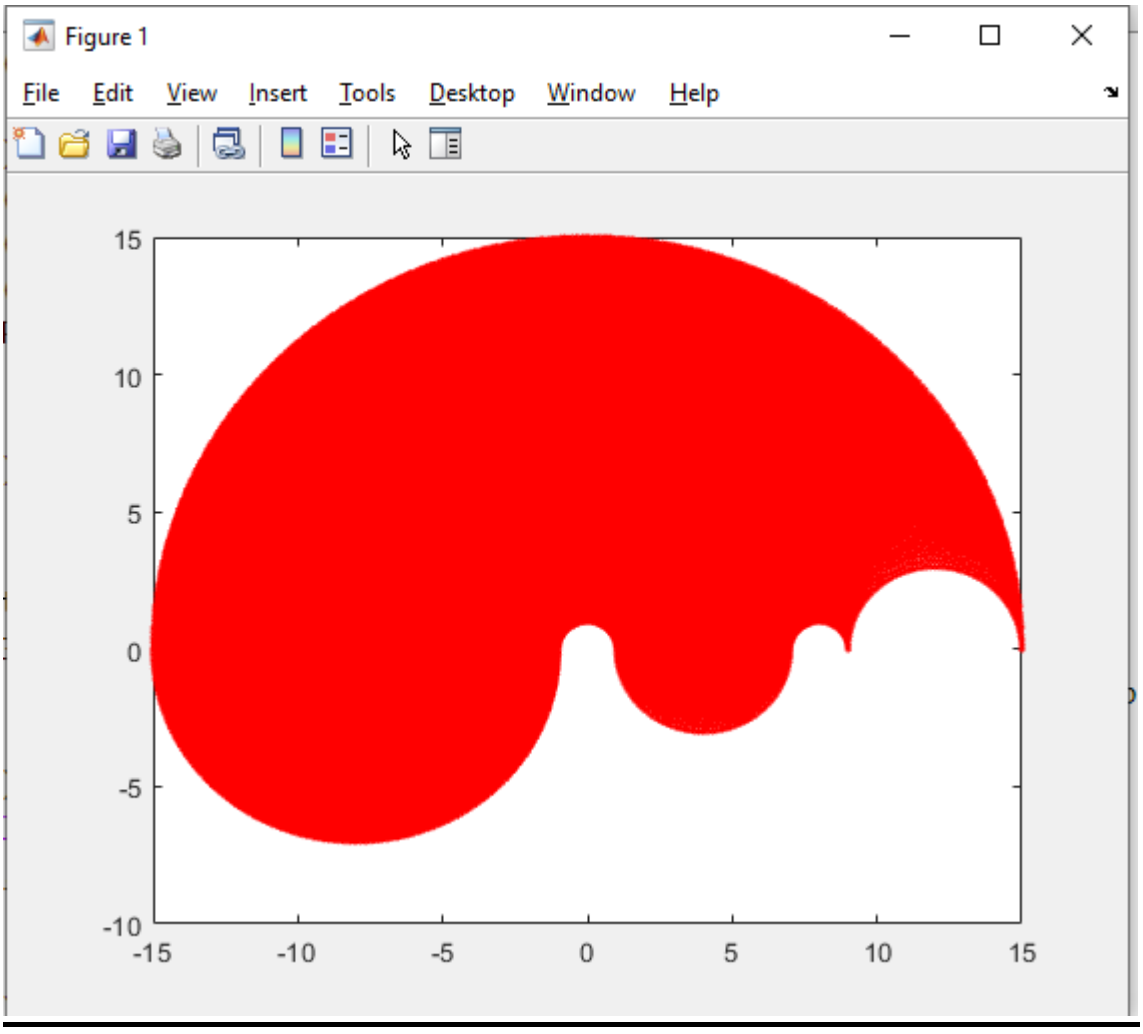
As shown, we used the same example and got the same angle of Action1.

You will then be returned to the menu

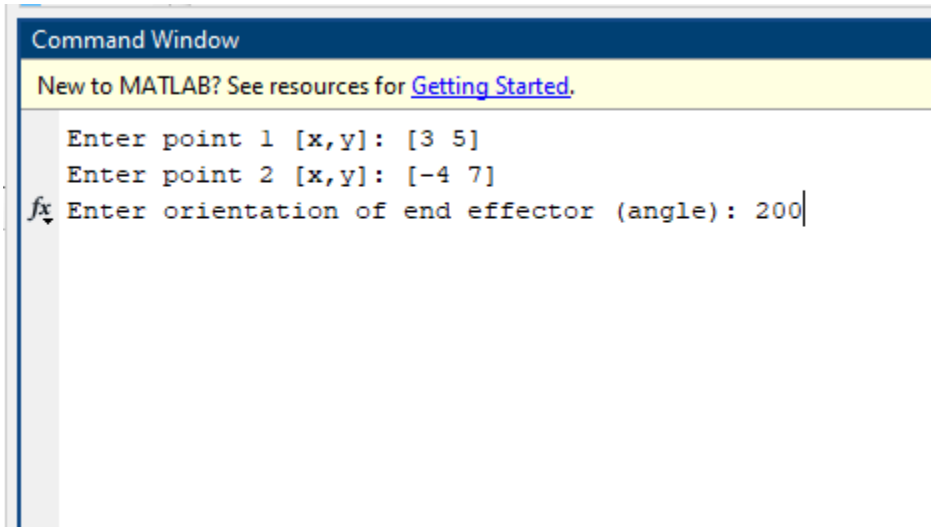
Action 3 (Calculating Working area)



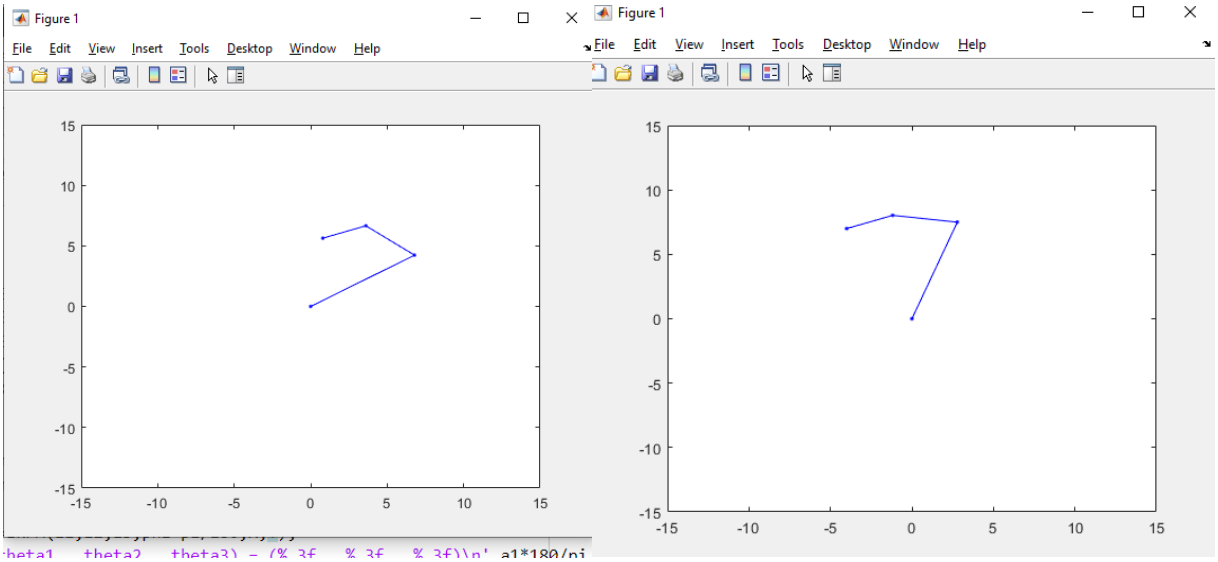
Action 4 (Plot Working area)



Action 5 (Trajectory)



Enter two points in the format shown with orientation



The robotic arm will animate and move between the two points.

Action 6 (Robot Animation)