Arm Lab-Group 13

2.1 The viable points will be represented by grid, because it is relatively easy to compute intermediate waypoints. We will store the points along the path in a matrix as angles for each joint. This makes it easy for us to write our path following code since all the angles are easily accessible.

2.2 The robot will reach the goals using Wavefront Planning. The biggest benefit to using Wavefront for this lab is because the configuration created for part 1 made it easy to define the world in part2 by converting the configuration space to a binary grid. We defined ones for obstacles and zeros for reachable space, then performed the Wavefront Planner. We had also used Wavefront planning for the Motion Planning lab, which made it easy for us to reuse a lot of our old code and adapt it to fit the arm lab.

2.3 Using two PID controls with feed forward; one PID control for each link. We can calculate the error between our current base angle and the target base angle and use that to change our torque for the base joint. The same can be done for the second joint.