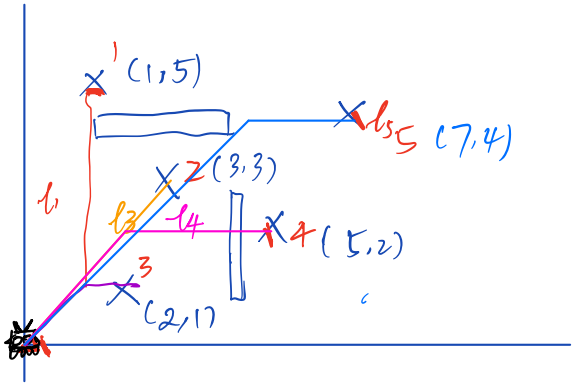
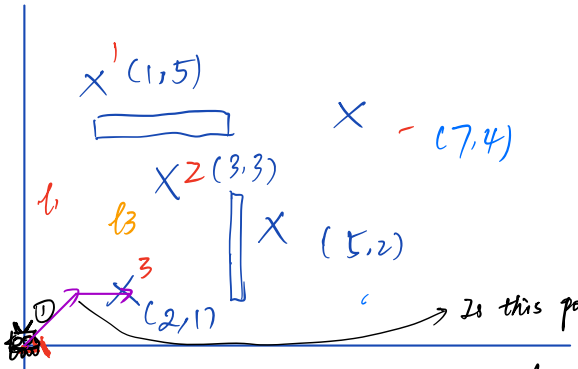
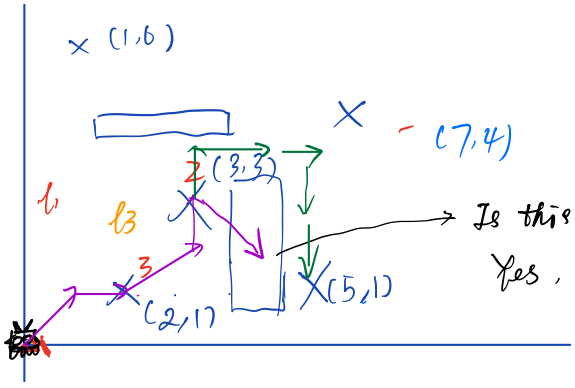
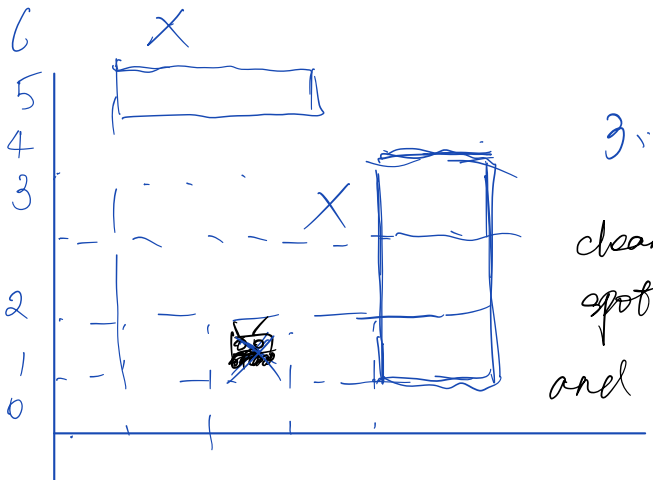


1. Calculate the distance between the start point and the end point and determine the closest point. In this case Point 3 first.

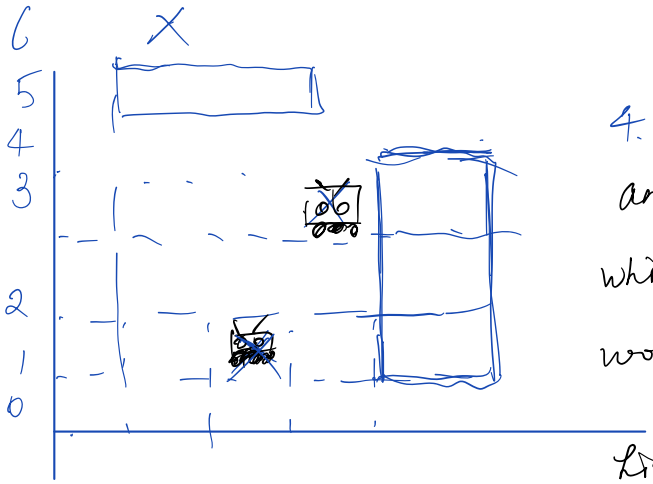


2. Move step by step to the target point. After each move, check if the robot will bump into the obstacles. If so, unmove and detour. If not, keep the new position





3. After reaching a certain spot and clean the spot, reevaluate the closest spot and go there by repeating step 1 and step 2.



4. Based on each robot's cleaning effiency and moving effiency, we allocate robots which has higher moving effiency to farther work places and robots which has higher clean efficiency start at spots close to their workplace and assign them heavier clean load.