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M0:
The check_collision function finds the end point positions of each of the links of the arm. Using those end points, it creates a repeated matrix of them according to a resolution given. It then finds the points in between the position of the 2nd end and the first and the points between the position of the 3rd and the 2nd and puts them together in a single matrix. It will then check if any of the points come into collision with the spheres by summing up the points subtracted by the repeated matrix of sphere centers squared and seeing if they are less than the link radius added to the sphere radii squared. This will assess if the links come into contact with any of the obstacles.

The check_edge function includes the check_collision function but instead utilizes the start and end configurations. It will find a repeated matrix for configurations between the start and end configuration and check if they are in collision with the obstacles.

What could be a problem in both functions are the resolution. If the resolution is too low for either function, it is possible the functions could miss a collision.