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B2 – Collisions Report

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The data structure we implemented is a k-d tree, we modified it so that the prism object that is querying for the nearest neighbor doesn't find itself. The algorithm goes down the levels of the tree (which contains prism objects) computing the nearest distance (from current node in tree to position we specify). We are querying the origin of each prism, when our tree finds the prism with the smallest distance from the position we specify, we create a PrismCollision object with the object whose position we specified and its nearest neighbor.

Extra Credit:

b) [3 points] Borrow an existing implementation and integrate it. (You must cite where you found the implementation.)

   - We implemented a k-d tree to pick out unique pairs of prisms to check collisions for.

   - SOURCE: https://gist.github.com/ditzel/194ec800053ce7083b73faa1be9101b0