Prim's algorithm is a greedy algorithm, meaning that it chooses the piece that offers the most optimal path that returns the most immediate benefit. Prim's algorithm operates as a spanning tree, in so all vertices must be connected. So the two disjoint subsets of vertices must be connected and they must be connected with the minimum weight edge. From this, the algorithm creates the minimum spanning tree.

My code was referenced from https://www.geeksforgeeks.org/prims-minimum-spanning-tree-mst-greedy-algo-5/. Here, the root was chosen to be vertex 0. Three vectors were used, one to keep track of visited, path, and the weights. Using the algorithm, it checks all the neighboring vertices and considered if they had been visited or not. It follows the edges and keeps track of each vertex it passes, and prints them out to terminal alongside their respected weights. From this, the minimum spanning tree is created.