This code implements Prim's algorithm for finding the Minimum Spanning Tree (MST) of a weighted, undirected graph. The resulting MST should connect all vertices with the minimum total edge weight. The sum of the weights in the MST should be less than or equal to the sum of weights in any other spanning tree of the same graph. The algorithm should work as follows:

How it works:

1. Initialize the algorithm with a graph represented by vertices and weighted edges.
2. Choose an arbitrary starting vertex from the graph.
3. Initialize a set to keep track of vertices included in the MST.
4. While there are vertices not yet included in the MST:
    a. Among the edges that connect the vertices in the MST to the vertices not yet included, choose the edge with the minimum weight.
    b. Add the selected edge to the MST.
    c. Add the newly connected vertex to the set of vertices in the MST.
5. Repeat step 4 until all vertices are included in the MST.
6. The resulting set of edges forms the Minimum Spanning Tree of the graph.

Currently, the implementation of this feature contains a logic bug that causes the algorithm to deviate from its intended functionality.

One example of the algorithm's expected outcomes:

- Total MST Weight: 13

One example of the algorithm's actual outcomes:

- Total MST Weight: 27