

b.

Space complexity of reverse kruskal function is $O(|E| + |V|)$ because the parent array takes $O(|V|)$ space complexity where V is the number of nodes and spanningTree array takes $O(|E|)$. So, if E is greater, complexity is $O(|E|)$ and otherwise its $O(|V|)$

Time complexity is $O(E^2 + |E| + |V|)$ where V is the number of nodes and E is the number of edges.

c.

Time complexity for kruskal algorithm is $O(E \log V)$ or $O(E \log E)$ or Prims algorithm is $O(V^2)$. Here, the time complexity of reverse kruskal algorithm is less than kruskal and prims algorithm.

Prims algorithm implements an array to get the weight and list to implement the graph. Kruskal algorithm calculates the minimum spanning tree by getting sorted edges. Reverse kruskal algorithm first removes the edges which form the cycle and then it creates the minimum spanning tree.