Prims Algo:

Time complexity

1) Initializing key values

2) deleting minimum vertices

3) Find adjacency

4) performing decreasing key operation on all possible adjacent places

$$TC = v + v \log v + v^2 + E \log v$$

$$= v^2 + E \log v$$

$$= O(v^2 + E \log v)$$

$$= O(E \log v)$$