

Question 1

Linear Probing

Slot	0	1	2	3	4	5	6
Content	15	30	11	16	18		23

Quadratic Probing

Slot	0	1	2	3	4	5	6
Content	15	30	11	16	18		23

Double Hashing

Slot	0	1	2	3	4	5	6
Content	15	16	11	30	18		23

Question 2

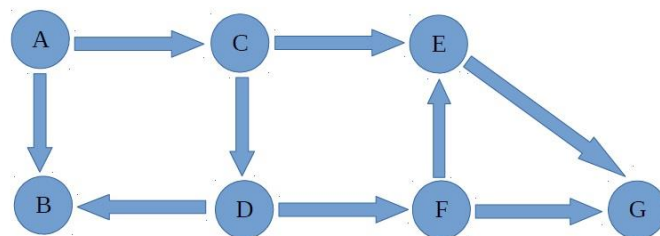
a)

```

topSort1(in theGraph:Graph, out aList:List) {
// Arranges the vertices in graph theGraph into a
// topological order and places them in list aList
    n = number of vertices in theGraph;
    for (step=1 through n) {
        select a vertex v that has no predecessors;
        aList.insert(1,v);
        Delete from theGraph vertex v and its edges;
    }
}

```

b)



Two different possible topological with the new algorithm can be;

1. A, C, D, B, F, E, G
2. A, C, D, F, E, G, B