

CS 202, Fall 2018

Homework #4 – Hash Tables, Graphs

Question1:

A- LINEAR

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

B- QUADRATIC

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

C- DOUBLE

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

Question2:

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-

A-C-D-F-E-B-G

A-C-E-D-F-G-B