

```
/**
* Title : Hash Tables, Graphs
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* Section : 2
* Assignment : 4
* Description : Report for the question1 and question 2
*/
```

Question 1.a)

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

Question 1.b)

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

Question 1.c)

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

Question 2.a)

```
topSort2( in theGraph:Graph):List {  
  
    s.createStack();  
  
    for (all vertices v in the graph theGraph){  
  
        if (v has no predecessors){  
  
            s.push(v);  
  
            Mark v as visited;  
  
        }  
  
        while (!s.isEmpty()){  
  
            if (all vertices adjacent to the vertex on top of the stack have been visited){  
  
                v = s.pop();  
  
                aList.add(0, v);  
  
            }  
  
            else{  
  
                Select an unvisited vertex u adjacent to vertex on top of the stack;  
  
                s.push(u);  
  
                Mark u as visited;  
  
            }}  
  
            return aList;  
  
        }  
    }
```

Question 2.b)

A C D B F E G

A C D F E G B