

QUIZ EXAMINATION
CSE 220: Data Structures

A

Section: _____ ID: _____ Name in CAPITAL: _____

Question 1 [8 marks]

Write a function called sumWeights() that takes a single adjacency matrix as its parameter. The function should identify the vertex whose outgoing edge weights have the highest total sum and the lowest total sum then print the result in the shown format.

[Note: if there are multiple highest sum weights then choosing any one of them is OK]

Sample Graph		Sample Output						
vtx	0	1	2	3	4	5	6	
0	0	0	60	0	50	0	0	
1	0	120	0	50	0	0	90	
2	60	0	0	0	0	50	0	
3	0	0	120	0	0	80	70	
4	0	0	0	90	0	0	40	
5	0	80	0	50	0	0	140	
6	0	0	0	70	40	140	0	

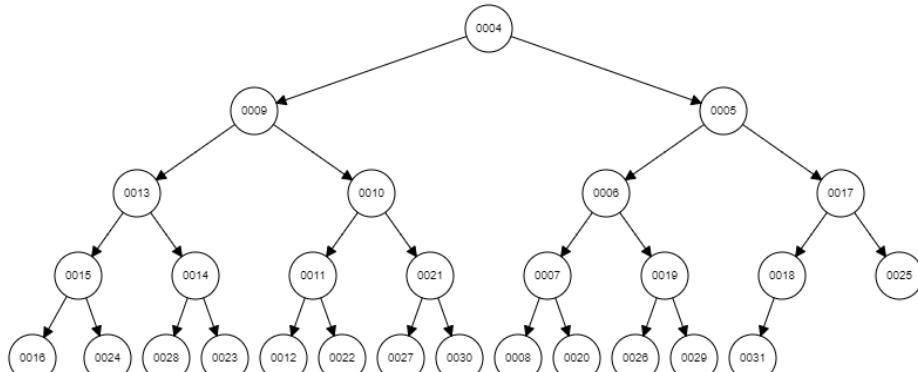
Max weight sum is 270 from vertex 3
Min weight sum is 110 from vertex 0

Draw the Graph from the Matrix in the other page [4 marks] (Don't waste space)

During insertion do we use sink() or swim() ? [1 marks]

To store 50 items in a heap, what length of array is needed? [1 marks]

Heap starts from 1 index



If 1 is inserted then which index would it go to after the swim operation? [1 marks]