

CCC2113 Data Structures and Algorithms Analysis

Lab 11: Heap (20/6/2024)

Identify each of the following tree as max heap or min heap. If any tree is NOT a heap, state the reasons.

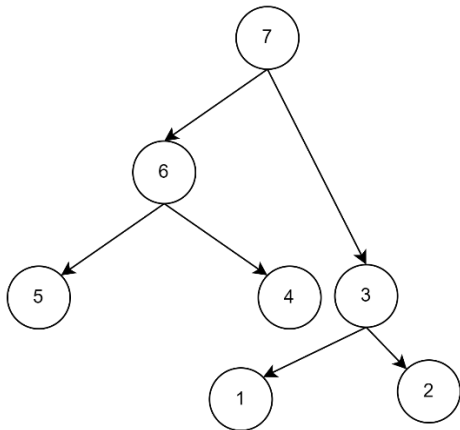


Figure A

Answer: Max Heap

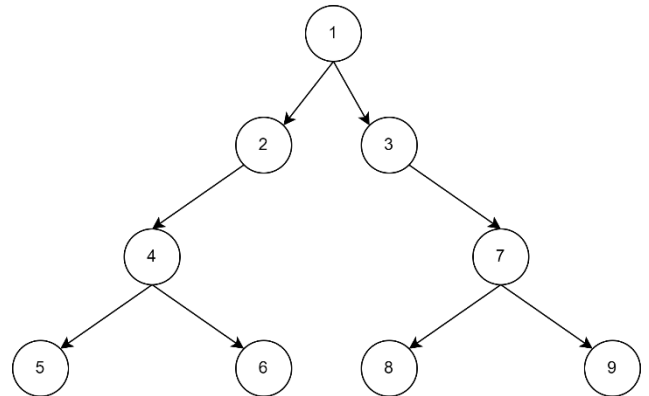


Figure B

Answer: Not a heap, not a complete binary tree

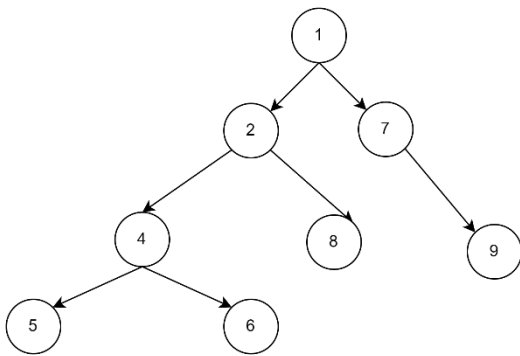


Figure C

Not a heap, not a complete binary tree

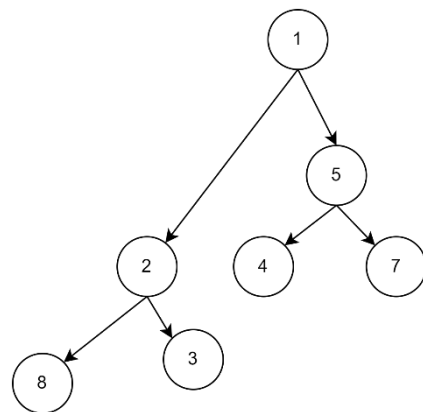


Figure D

Not a heap, not a max or min heap

Draw a heap based on the following array and identify the type of this heap

A[0]	A[1]	A[2]	A[3]	A[4]	A[5]	A[6]	A[7]	A[8]	A[9]	A[10]
80	65	75	50	65	50	40	30	20	7	7

