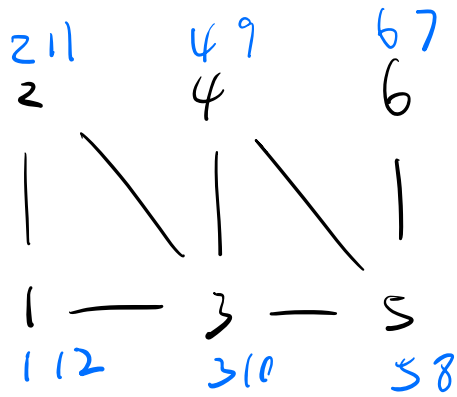


# Question 1

(a)



vertex	pre	post	parent / prev
1	1	12	null
2	2	11	1
3	3	10	2
4	4	9	3
5	5	8	4
6	6	7	5

(b) (s, b)

(c)

Queue	$d(1)$	$d(2)$	$d(3)$	$d(4)$	$d(5)$	$d(6)$
[1]	0	$\infty$	$\infty$	$\infty$	$\infty$	$\infty$
[2, 3]	0	1	1	$\infty$	$\infty$	$\infty$
[3]	0	1	1	$\infty$	$\infty$	$\infty$
[4, 5]	0	1	1	2	2	$\infty$
[5]	0	1	1	2	2	$\infty$
[6]	0	1	1	2	2	3
[]	0	1	1	2	2	3

Question 2

(a) preorder : A , B , D , C , E , G , F , H , I

Inorder : D , B , A , G , E , C , H , F , I

Postorder : D , B , G , E , H , I , F , C , A

(b) Preorder traversal