Parallel computing
Assignment-2 (Preliminary)

Prasanth Reddy Pallerla
PPallerl@uncc.edu
801033619

1)

	i=0	i=1	i=2	...	i=n-1
a)	a[0]R	a[1]R	a[2]R	...	~~a[n]~~ a[n-1]R
	b[0]w	b[1]w	b[2]w		b[n-1]w

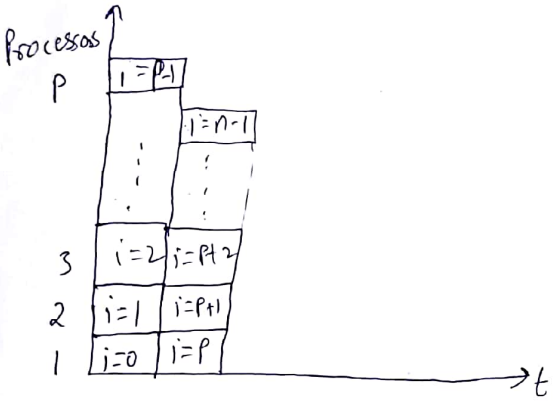
b) Width = n

Critical path = O(1)+t

Work = n(O(1)+t)

Assume time taken to write into b[1] as 't'

c)



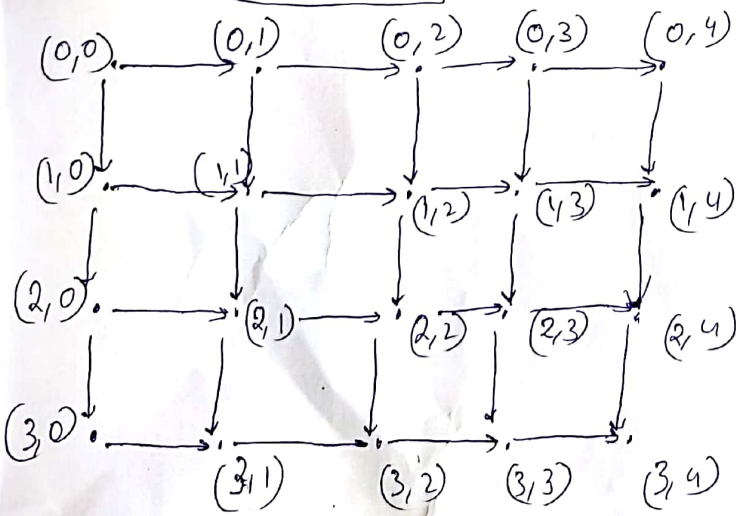
2)

a) Complexity for 1st for loop is O(m)

complexity for 2nd, 3rd for loop is O(nm)

since O(nm) > O(m)

Complexity = O(nm)



Work = $\Theta(nm)$

width = min(n, m)

Critical path = ~~n+m-2~~
= n+m-1