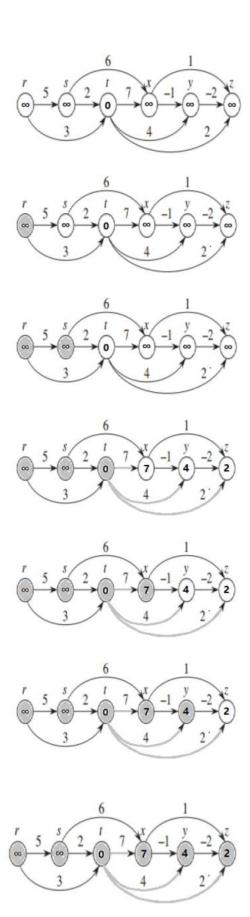
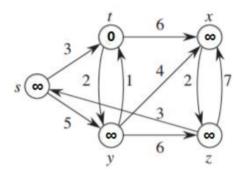
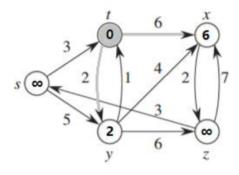
## EL9343 Homework 12 Solutions

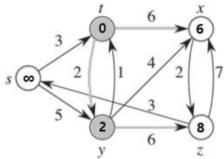
1.

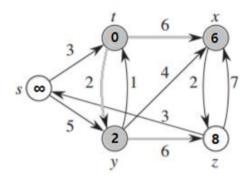
	vertex								
· d									
		t							
	$\alpha$	00	00	00	0				
		8							
	2		6						
	2	4	6	9	0				
	2	4	6	9	Ь				
・ てし	/alues:								
	S	t	x	y	Z				
	_	-	-	-	-				
	7	S							
		X			-				
	3	X	y	2					
			0						
	2	X	y	2					
Channin		*			- 10 ( <del>)</del>	( ۷	<i>t</i> :0	CL	
Changin	y the	weish	+ of	ed	- ee (2	(x)	to	4	
Changing and a	y the	weish	+ of	ed	ee cz	,x) sow	to	4	
Changin and i	y the using values	weigh vertex :	+ of	ed as	the	,x) sow	to	4	
Changin and u	is the values	weish vertex :	+ of ; s	ed as	the Z	, x) sow	to	4	
Changin and i	y the estimates	weish vertex :	+ of ; s ×	ed as y	the Z	, x) sow	to	4	
Changin and i	y the using values S O	weigh vertex : t	+ of « S × × × × × × × × × × × × × × × × × ×	ed as y sp	the t	, X) 30W	to	4	
Changin and a	y the asily values S O O	weish vertex  t  oo  b  6	+ of × × × × × × × × × × × × × × × × × ×	ed as y	the Z	, x) 50m	to	4	
Changin and i	y the issity values S O O O	weigh vertex : t 00 6 6	+ of × × × × × × × × 4	2 ed. 49 9 9 7 7 7	the 7 00 00 00 00 00 00 00 00 00 00 00 00 0	, X) 30W	to	4	
ernd u	y the assing values S O D O O	weight vertex:  t  6  2  2	+ of × × × × × × × × × × × × × × × × × ×	2 ed. 49 9 9 7 7 7	the 7 00 00 00 00 00 00 00 00 00 00 00 00 0	,x) sow	to	4	
Changing and i	y the issity values S O O O O O O O O O O O O O O O O O O	weigh Vertex : t 00 6 6 2	+ of × × × × × × × × × × × × × × × × × ×	2 ed. 49 7 7 7 7 7	the 7 00 00 2 2 2 -2	, X) 50w	to	4	
ernd u	y the assing values SOO	weigh vertex  t  c  b  c  c  t  c  t  c  t  c  t  t  c  t  t	+ of × × × × × × × × × × × × × × × × × ×	ed as y y y y	the 7 00 00 2 2 2 -2	(x, 20ur	to	4	
ernd u	y the issity values S O O O O O O O O O O O O O O O O O O	weigh vertex  t b 6 2 2	+ of × × × × × × × × × × × × × × × × × ×	ed as y y y y y y y y y	the	,x) sow	to	4	
ernd u	y the issity values S O O O O O Alues: S -	weigh vertex  t  c  b  c  c  t  c  c	+ of × × × × × × × × × × × × × × × × × ×	2 ed. 48 7 7 7 7 7 7 7 9 - 8	the	,x) 50w	to	4	
ernd u	y the issity values S O O O O O Alues: S -	weish vertex  t b c c c c c c c c c c c c c c c c c	+ of × × × × × × × × × × × × × × × × × ×	9 ed 9 7 7 7 7 7 7 9 - s s	the	(x, 20w	to	4	

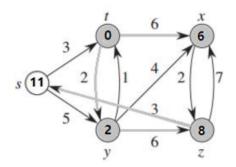


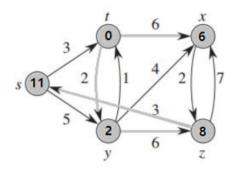












d	S	t	х	у	z
	∞	0	$\infty$	∞	$\infty$
1	∞	0	6	2	$\infty$
2	∞	0	6	2	8
3	∞	0	6	2	8
4	11	0	6	2	8
5	11	0	6	2	8

TT	S	t	×	7	7
v= ?	NIL	NIL	NIL	NIL	NLL
u=? u=t u=7 u=x u=3 u=S	NIL	NIL	t	t	NIL
u=7	NIL	NZL	t	t	7
u=7	NIL	NIL	t	t	7
u=2	2	NIL	t	t	4
u=S	Z	NIL	t	t	$\gamma$

k	$D^k$
0	$ \begin{pmatrix} 0 & \infty & \infty & \infty & -1 & \infty \\ 1 & 0 & \infty & 2 & \infty & \infty \\ \infty & 2 & 0 & \infty & \infty & -8 \\ -4 & \infty & \infty & 0 & 3 & \infty \\ \infty & 7 & \infty & \infty & 0 & \infty \\ \infty & 5 & 10 & \infty & \infty & 0 \end{pmatrix} $
1	$ \begin{pmatrix} 0 & \infty & \infty & \infty & -1 & \infty \\ 1 & 0 & \infty & 2 & 0 & \infty \\ \infty & 2 & 0 & \infty & \infty & -8 \\ -4 & \infty & \infty & 0 & -5 & \infty \\ \infty & 7 & \infty & \infty & 0 & \infty \\ \infty & 5 & 10 & \infty & \infty & 0 \end{pmatrix} $
2	$ \left(\begin{array}{ccccccccc} 0 & \infty & \infty & \infty & -1 & \infty \\ 1 & 0 & \infty & 2 & 0 & \infty \\ 3 & 2 & 0 & 4 & 2 & -8 \\ -4 & \infty & \infty & 0 & -5 & \infty \\ 8 & 7 & \infty & 9 & 0 & \infty \\ 6 & 5 & 10 & 7 & 5 & 0 \end{array}\right) $
3	$ \begin{pmatrix} 0 & \infty & \infty & \infty & -1 & \infty \\ 1 & 0 & \infty & 2 & 0 & \infty \\ 3 & 2 & 0 & 4 & 2 & -8 \\ -4 & \infty & \infty & 0 & -5 & \infty \\ 8 & 7 & \infty & 9 & 0 & \infty \\ 6 & 5 & 10 & 7 & 5 & 0 \end{pmatrix} $
4	$ \left( \begin{array}{cccccccccccccccccccccccccccccccccccc$
5	$ \begin{pmatrix} 0 & 6 & \infty & 8 & -1 & \infty \\ -2 & 0 & \infty & 2 & -3 & \infty \\ 0 & 2 & 0 & 4 & -1 & -8 \\ -4 & 2 & \infty & 0 & -5 & \infty \\ 5 & 7 & \infty & 9 & 0 & \infty \\ 3 & 5 & 10 & 7 & 2 & 0 \end{pmatrix} $
6	$ \begin{pmatrix} 0 & 6 & \infty & 8 & -1 & \infty \\ -2 & 0 & \infty & 2 & -3 & \infty \\ -5 & -3 & 0 & -1 & -6 & -8 \\ -4 & 2 & \infty & 0 & -5 & \infty \\ 5 & 7 & \infty & 9 & 0 & \infty \\ 3 & 5 & 10 & 7 & 2 & 0 \end{pmatrix} $