HW 6   Networks

[P21] a) Home addr: 192.168.1.1,   192.168.1.2,   192.168.1.3
192.168.1.4

b)

WAN Side	LAN Side
24.34.112.235.4000	192.168.1.1.3345
24.34.112.235.4001	.3346
24.34.112.235.4002	.3345
24.34.112.235.4003	.3346
24.34.112.235.4004	.3345
24.34.112.235.4005	.3346

[P24]

"using Dijkstra's Algorithm" Chart

Shortest paths from x:

t: $xut = 7$
u: $xvu = 6$
v: $xv = 3$
w: $xw = 6$
y: $xy = 6$
z: $xz = 8$

P27 a) Dijkstra's Algorithm

Num	N'	D(u),p(u)	D(v),p(v)	D(w),p(w)	D(x),p(x)	y	z
0	t	2,t	4t	∞	∞	7t	∞
1	ta	2t	4t	5u	∞	7t	∞
2	tuv	2t	4t	5u	7v	7t	∞
3	tuvw	2t	4t	5u	7v	7t	∞
4	tuvwy	2t	4t	5u	7v	7t	15x
5	tuvwyz	2t	4t	5u	7v	7t	15x
6	tuvwxyz	2t	4t	5u	7v	7t	15x

P30 a)   min cost from w to u = 5
        min cost from w → y = 6

Distance vectors from node x:
 $V_x(w) = 2$
 $V_x(y) = 5$
 $V_x(u) = \infty$

Neighbor y → w from x:
 $V_x(w) = 2$
 $V_x(y) = 4$
 $V_y(u) = 7$

P31

$D_m(m) = 0$
$D_m(n) = \min\{c(m,n) + D_n(n), \; c(m,n) + D_G(n)\}$

Distance table at y after initialization

	x	y	z
x	NA	NA	NA
y	NA	NA	NA
z	4	6	0