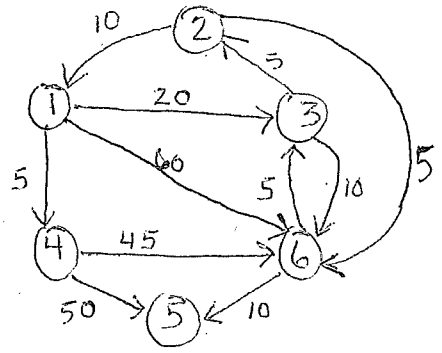
C



C

	1	2	3	4	5	6
1	-	-	20	5	-	60
2	10	-	-	-	-	5
3	-	5	-	-	-	10
4	-	-	-	-	50	45
5	-	-	-	-	-	-
6	-	-	5	-	10	-

Performing Dijkstra's alg

T[w].dist

	✓1	✓2	✓3	✓4	5	✓6
	0	~~∞~~	~~∞~~	~~∞~~	∞	~~∞~~
v=1		~~∞~~	20	5	∞	60
v=4		~~∞~~	20		55	50
v=3		25			~~55~~	**30**
v=2					55	30
v=6					40	
Final:	0	25	20	5	40	30

T[w].path

	✓1	✓2	✓3	✓4	5	✓6
	0	~~∅~~	~~∅~~	~~∅~~	∅	~~∅~~
v=1		~~∅~~	1	1	∅	1
v=4		~~∅~~	1		4	4
v=3		3			~~4~~	**3**
v=2					4	3
v=6					6	
Final:	0	3	1	1	6	3

T[v].dist + C[v][w]

v=1, w=3: 0 + 20 = 20

w=4: 0 + 5 = 5

w=6: 0 + 60 = 60

v=4, w=5: 5 + 50 = 55

w=6: 5 + 45 = 50

v=3, w=2: 20 + 5 = 25

v=2, w=1 visited, w=6: 25 + 5 = 30

v=6, w=3 already visited

w=5: 30 + 10 = 40

Find path from 1 to 5.

How to get to 5?

From T[5].path: 6

How to get to 6?

From T[6].path: 3

How to get to 3?

From T[3].path: 1

How to get to 1?

T[1].path is 0: base case

So path is 1 3 6 5.