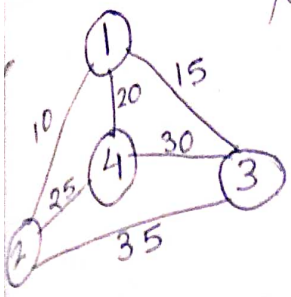
TSP
Dynamic Prog.



	1	2	3	4
1	∞	10	15	20
2	10	∞	35	25
3	15 (10)	35	∞	30
4	20	25	30	∞

$g(1,\phi) = \infty$ $\quad g(2,\phi) = 10$, $\quad g(3,\phi) = 15$ $\quad g(4,\phi) = 20$

$g(2,\{3\}) = C_{23} + g(3,\phi) = 35 + 15 = 50$ (2-3-1)

$g(2,\{4\}) = C_{24} + g(4,\phi) = 25 + 20 = 45$ (2-4-1)

$g(3,\{2\}) = C_{32} + g(2,\phi) = 35 + 10 = 45$ (3-2-1)

$g(3,\{4\}) = C_{34} + g(4,\phi) = 30 + 20 = 50$ (3-4-1)

$g(4,\{2\}) = C_{42} + g(2,\phi) = 25 + 10 = 35$ (4-2-1)

$g(4,\{3\}) = C_{43} + g(3,\phi) = 30 + 15 = 45$. (4-3-1)

$i=2$

$g(2,\{3,4\}) = \min\{C_{23} + g(3,\{4\}), C_{24} + g(4,\{3\})\}$

$= \min\{35 + 50, 25 + 45\} = \min\{85, 70\}$

$= 70$ (2-4-3-1)

$g(3,\{2,4\}) = \min\{C_{32} + g(2,\{4\}), C_{34} + g(4,\{2\})\}$

$= \min\{35 + 45, 30 + 35\}$

$= 65$ (3-4-2-1)

$g(4,\{2,3\}) = \min\{C_{42} + g(2,\{3\}), C_{43} + g(3,\{2\})\}$

$= \min\{25 + 45, 30 + 45\}$

$= 70$ (4-2-3-1)

$g(1,\{2,3,4\}) = \min\{C_{12} + g(2,\{3,4\}), C_{13} + g(3,\{2,4\}), C_{14} + g(4,\{2,3\})\}$

$= \min\{10 + 70, 15 + 65, 20 + 70\}$ 1-3-2-4-1

$= 80$ (1-2-4-3-1)