

Multistage Graph(Problem)

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Multistage Graph :-

Main()

int stages = 4, min;

int n = 8;

int cost[9], d[9], Path[9];

int C[9][9] = { {0, 0, 0, 0, 0, 0, 0, 0},
↓ { - - - } }

This is to store all

the possible distance from a vertex to
other vertex. Cost(n) = 0 \rightarrow Last vertex.

for (int i = n - 1; i >= 1; i--) \rightarrow finding cost of
min = 327 + 7; remaining vertex.

for (k = i + 1; k <= n; k++) { \rightarrow considering all the
ij (C[i][k]) = 0 \wedge for no edge vertex value greater
 \wedge than current.

C[i][k] \rightarrow C[k] < min } of

$$\min = C[i][k] + C[k]; \quad \text{if cost is } < \min$$

$d[i] = k;$

$\text{cost}[i] = \min; \rightarrow \text{Assigning the minimum.}$

$P[i] = \text{starting} \rightarrow \text{ending}$

$\text{for (int } i=2; i < \text{stages}; i++)$

$P[i] = d[P[i-1]]; \rightarrow \text{To calculate the path to take.}$

0	1	2	3	4	5	6	7	8
19	7	11	12	6	4	5	0	

0	1	2	3	4	5	6	7	8
2	6	6	5	8	8	8		

0	1	2	3	4
	1	2	6	8

$1 \rightarrow 2 \rightarrow 6 \rightarrow 8$