#include <stdio.h>

#include <limits.h>

#define V 4

void floydWarshall(int graph[V][V]) {

int dist[V][V];

for (int i = 0; i < V; i++) {

for (int j = 0; j < V; j++) {

dist[i][j] = graph[i][j];

} }

for (int k = 0; k < V; k++) {

for (int i = 0; i < V; i++) {

for (int j = 0; j < V; j++) {

if (dist[i][k] != INT\_MAX && dist[k][j] != INT\_MAX &&

dist[i][k] + dist[k][j] < dist[i][j]) {

dist[i][j] = dist[i][k] + dist[k][j];

} } } }

printf("All Pair Shortest Paths:\n");

for (int i = 0; i < V; i++) {

for (int j = 0; j < V; j++) {

if (dist[i][j] == INT\_MAX) {

printf("INF\t");

} else {

printf("%d\t", dist[i][j]);

}

}

printf("\n"); }}

int main() {

int graph[V][V] = {

{0, 5, INT\_MAX, 10},

{INT\_MAX, 0, 3, 0},

{2, INT\_MAX, 0, 1},

{INT\_MAX, INT\_MAX, INT\_MAX, 0} };

floydWarshall(graph);

return 0; }