**Write a program for floyd’s warshall algorithm**

#define INF 999

void printMatrix(int matrix[][nV]);

// Implementing floyd warshall algorithm

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

int matrix[nV][nV], i, j, k;

for (i = 0; i < nV; i++)

for (j = 0; j < nV; j++)

matrix[i][j] = graph[i][j];

// Adding vertices individually

for (k = 0; k < nV; k++) {

for (i = 0; i < nV; i++) {

for (j = 0; j < nV; j++) {

if (matrix[i][k] + matrix[k][j] < matrix[i][j])

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

}

}

}

printMatrix(matrix);

}

void printMatrix(int matrix[][nV]) {

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

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

if (matrix[i][j] == INF)

printf("%4s", "INF");

else

printf("%4d", matrix[i][j]);

}

printf("\n");

}

}

int main() {

int graph[nV][nV] = {{0, 3, INF, 5},

{2, 0, INF, 4},

{INF, 1, 0, INF},

{INF, INF, 2, 0}};

FloydWarshall(graph);

}

