Aim: To make a graph in matrix form.

Code:

#include <iostream>

using namespace std;

class Graph {

private:

bool\*\* adjMatrix;

int numVertices;

public:

Graph(int numVertices) {

this->numVertices = numVertices;

adjMatrix = new bool\*[numVertices];

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

adjMatrix[i] = new bool[numVertices];

for (int j = 0; j < numVertices; j++)

adjMatrix[i][j] = false;

}

}

void addEdge(int i, int j) {

adjMatrix[i][j] = true;

adjMatrix[j][i] = true;

}

void removeEdge(int i, int j) {

adjMatrix[i][j] = false;

adjMatrix[j][i] = false;

}

void toString() {

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

cout << i << " : ";

for (int j = 0; j < numVertices; j++)

cout << adjMatrix[i][j] << " ";

cout << "\n";

}

}

Graph() {

for (int i = 0; i < numVertices; i++)

delete[] adjMatrix[i];

delete[] adjMatrix;

}

};

int main() {

Graph g(4);

g.addEdge(0, 1);

g.addEdge(0, 2);

g.addEdge(1, 2);

g.addEdge(2, 0);

g.addEdge(2, 3);

g.toString();

}