warshalls\_07.cpp

**Compile:** g++ warshalls\_07.cpp -o warshalls\_07

**Run:** ./warshalls\_07

**Program:**

#include<iostream>

using namespace std;

int n=10;

classwarshall{

int mat[10][10],m,dist;

public:

warshall()

{

cout<<"enter the number of node"<<endl;

cin>>m;

for(inti=0;i<m;i++)

{

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

{

cout<<"Enter the distance from "<<i<<"to"<<j<<" : "<<endl;

cin>>mat[i][j];

}

}

}

voidshort\_path()

{

display();

for(inti=0;i<m;i++)

{

cout<<"Intermediate node :"<<i+1<<endl;

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

{

for(int k=0;k<m;k++)

{

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

if(dist<=mat[j][k])

mat[j][k]=dist;

}

}

display();

}

}

void display()

{

cout<<"The distance is :"<<endl;

for(inti=0;i<m;i++)

{

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

{

cout<<mat[i][j]<<"\t";

}cout<<endl;

}

}

};

int main()

{

warshall w;

w.short\_path();

//w.display();

return 0;

}

**Output:**

