**Practical No: 03**

**Write the program for the following:**

1. **Write a program to generate the adjacency matrix**

**CODE 1:**

#include<iostream>

using namespace std;

int arr[20][20];

int count = 0;

void matrix(int s) {

int i, j;

cout<<"Adjucancy Matrix:"<<endl;

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

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

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

}

cout << endl;

}

}

void add\_edge(int v, int s) {

arr[v][s] = 1;

arr[s][v] = 1;

}

int main() {

int s= 4;

add\_edge(0, 1);

add\_edge(0, 2);

add\_edge(1, 2);

add\_edge(1, 0);

add\_edge(1, 2);

add\_edge(1, 3);

add\_edge(2, 0);

add\_edge(2, 1);

add\_edge(2, 3);

add\_edge(3, 1);

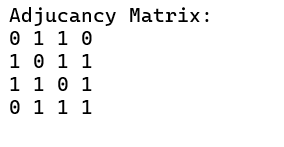
add\_edge(3, 2);

add\_edge(3, 3);

matrix(s);}

**OUTPUT:**

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**……………………………………………………………………………………..**

**Code 2:**

#include<iostream>

#include<conio.h>

using namespace std;

int main(){

int i,j;

int arr[4][4]={(0,0,0,0),(0,0,0,0),(0,0,0,0),(0,0,0,0)};

for(i=0;i<4;i++){

for(j=0;j<4;j++){

char ch;

cout<<"Is there any egde between"<<i<<" "<<"and"<<" "<<j<<":";

ch=getche();

cout<<endl;

if(ch=='y'){

arr[i][j]=1;

}

}

}

for(i=0;i<4;i++){

for(j=0;j<4;j++){

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

}

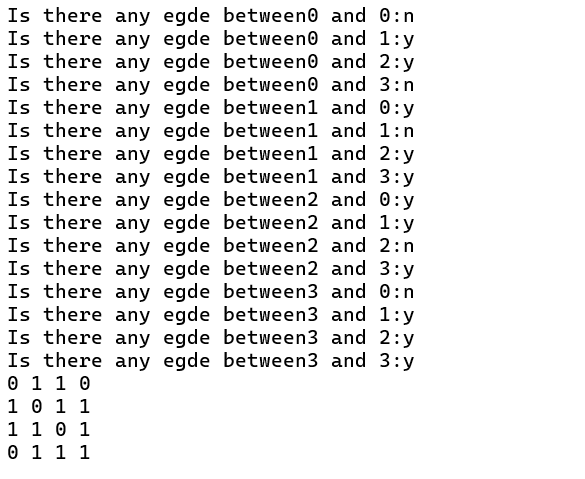
cout<<endl;

}

return 0;}

**OUTPUT:**

**………………………………………………………………..**



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