Rizvi College of Engineering Data Structure Lab

***Department:*** Computer Engineering (Sem III)

***Class:*** *Second Year (S.E)*

***Subject:*** Data Structures Lab

***Expt. No.12B***

***Title: Depth First Search***

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**CODE: -**

#include<stdio.h>

#include<stdlib.h>

#define max 10

int adj[max][max],visited[max];

void depth(int l,int pos);

int main(void)

{

int n,i,j;

printf("Enter the number of nodes: ");

scanf("%d",&n);

printf("Enter the elements of the adjacency matrix(connection between the nodes):\n");

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

{

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

scanf("%d",&adj[i][j]);

}

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

visited[i]=0;

depth(n,0);

return 0;

}

void depth(int len,int pos)

{

int j;

printf("Visited Node: %d\n",pos);

visited[pos]=1;

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

{

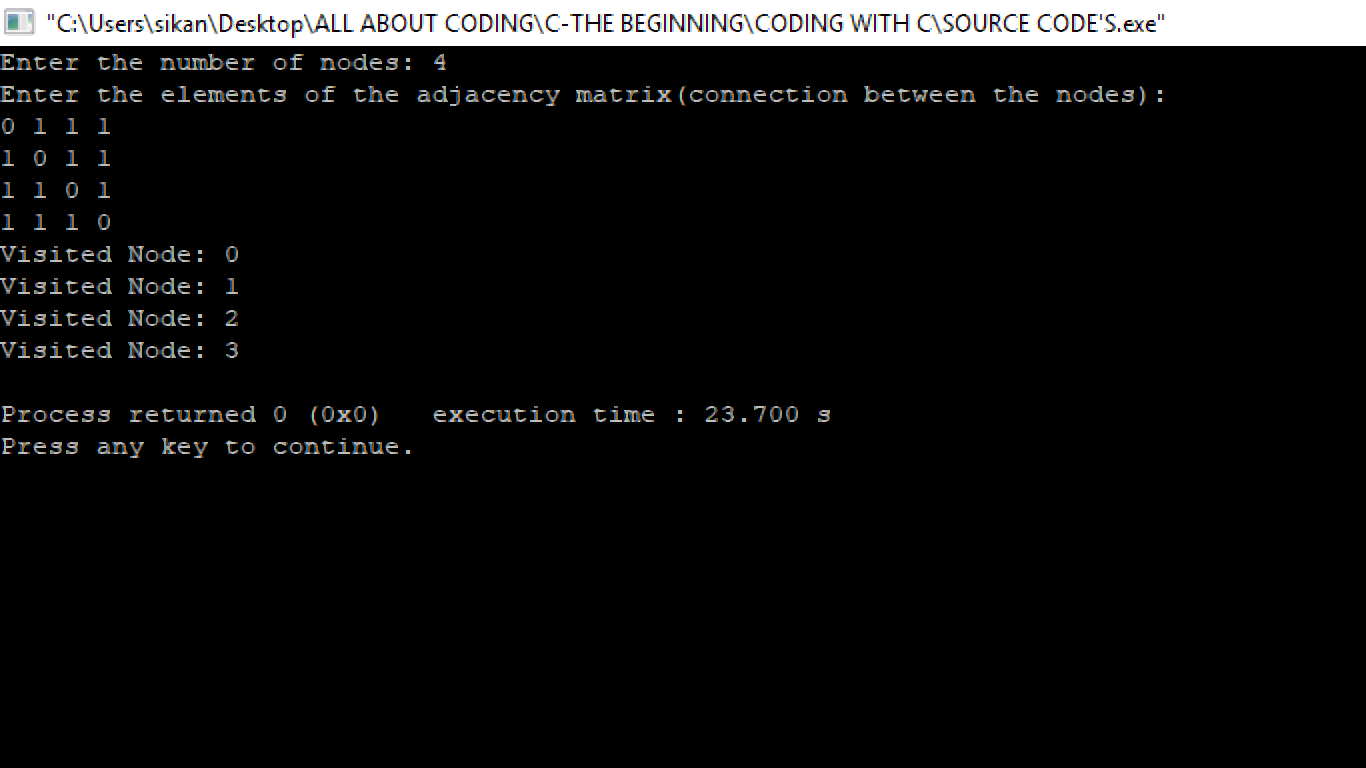
if(visited[j]==0 && adj[pos][j]==1)

depth(len,j);

}

}

**OUTPUT: -**

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