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**I’d: 191-15-12145**

**Week 08**

**DFS problem 01:**

#include<stdio.h>

void DFS(int);

int G[15][15],visited[15],n;

void main(){

int i,j;

printf("Enter Number of Sub-office:");

scanf("%d",&n);

printf("\nEnter Their Connection using Matrix:\n");

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

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

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

}

}

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

visited[i]=0;

}

DFS(0);

}

void DFS(int i){

int j;

printf("\n%d",i);

visited[i]=1;

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

if(!visited[j]&&G[i][j]==1){

DFS(j);

}

}

}

**DFS problem 02:**

#include<stdio.h>

void DFS(int);

int G[15][15],visited[15],n;

void main(){

int i,j;

printf("Enter number of Cloths:");

scanf("%d",&n);

printf("\nTheir Connection:\n");

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

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

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

}

}

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

visited[i]=0;

}

DFS(0);

}

void DFS(int i){

int j;

printf("\n%d",i);

visited[i]=1;

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

if(!visited[j]&&G[i][j]==1){

DFS(j);

}

}

}