



Daffodil *International* **University**

WEEK-8

Name: Md. Amirul Islam

ID: 191-15-12123

SEC: O-14

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);
```

```
}
```

```
}
```

```
}
```