

Practice Problem1:

```
#include<stdio.h>
```

```
void DFS(int);
```

```
int G[10][10],visited[10],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("Visiting Office:")
```

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

```
    visited[i]=1;
```

```

for(j=0; j<n; j++)
{
if(!visited[j]&&G[i][j]==1)
{
DFS(j);
}
}
}

```

Practice Problem2:

```

#include<stdio.h>

void DFS(int);

int G[10][10],visited[10],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("Wearing list:")  
    printf("\n%d",i);  
    visited[i]=1;  
    for(j=0; j<n; j++)  
    {  
        if(!visited[j]&&G[i][j]==1)  
        {  
            DFS(j);  
        }  
    }  
}
```