```
1: #include<stdio.h>
 2: #include<stdlib.h>
 3:
 4: int visited[7] = {0,0,0,0,0,0,0,0};
        int A [7][7] = {
 5:
            {0,1,1,1,0,0,0},
 6:
 7:
            \{1,0,1,0,0,0,0,0\},
 8:
            {1,1,0,1,1,0,0},
            {1,0,1,0,1,0,0},
 9:
            \{0,0,1,1,0,1,1\},
10:
11:
            {0,0,0,0,1,0,0},
12:
            {0,0,0,0,1,0,0}
13:
        };
14:
15: void DFS(int i){
        printf("%d ", i);
16:
        visited[i] = 1;
17:
18:
        for (int j = 0; j < 7; j++)
19:
        {
20:
            if(A[i][j]==1 && !visited[j]){
                 DFS(j);
21:
22:
            }
        }
23:
24: }
25:
26: int main(){
27:
        // DFS Implementation
28:
        DFS(0);
29:
        return 0;
30: }
31:
```