Depth first search:

```
#include<stdio.h>
int a[10][10], n, vis[10];
int dfs(int v);
int main(){
   int i, j;
   printf("Enter number of vertices:\n");
   scanf("%d", &n);
   printf("Enter adjacency matric:\n");
   for(i = 1; i<=n; i++)
   {
      for(j=1; j<=n;j++)
         scanf("%d", &a[i][j]);
   }
   for(i = 1; i<=n; i++)
      vis[i] = 0;
   printf("DFS Traversal\n");
   for(i = 1; i<=n; i++)
   {
      if(vis[i] == 0)
         dfs(i);
```

```
    }
    return 0;
}int dfs(int v){
    int i;
    vis[v] = 1;
    printf("%d", v);
    for(i=1; i<=n; i++)
    {
        if(a[v][i] == 1 && vis[i] == 0)
            dfs(i);
    }
}
```