TOPOLOGICAL ORDER

```
#include<stdio.h>
#include<conio.h>
int a[10][10], vis[10], E[10], n, J=0;
void dfs(int v);
void main(){
  int m,c,d;
  printf("Enter the number of vertices");
  scanf("%d",&n);
  for(int i=1;i<=n;i++){
     for(int j=0; j<=n; j++){
        a[i][j]=0;
     }
  printf("Enter the number of edges");
  scanf("%d",&m);
  for(int i=1;i \le m;i++){
     printf("Enter the edges");
     scanf("%d%d",&c,&d);
     a[c][d]=1;
  }
  for(int i=1;i<=n;i++){
     if(vis[i]==0){
        dfs(i);
     }
  }
  printf("Topological Order\n");
  for(int i=n-1; i>=0; i--){
     printf("%d\t",E[i]);
  }
```

```
void dfs(int v){
  vis[v]=1;
  for(int i=1;i<=n;i++){
     if(a[v][i]==1 && vis[i]==0){
        dfs(i);
     }
  }
  E[J++]=v;
}</pre>
```

OUTPUT:

```
Enter the number of vertices 5
Enter the number of edges 5
Enter the edges1 3
Enter the edges2 3
Enter the edges3 4
Enter the edges4 5
Enter the edges4 5
Enter the edges3 5
Topological Order
2 1 3 4 5
Process returned 2 (0x2) execution time : 146.019 s
Press any key to continue.
```