

C:\WINDOWS\SYSTEM32\cmd.exe

Enter the No: of Vertices:

5

Enter the Adjacency Matrix:

0 0 1 0 0

0 0 1 0 0

0 0 0 1 1

0 0 0 0 1

0 0 0 0 0

The topological order is:1 2 3 4 5

-----

(program exited with code: 0)

Press any key to continue . . .

```

1  #include <stdio.h>
2
3  int main()
4  {
5      int i,j,k,n,a[10][10],indegree[10],flag[10],count=0;
6
7      printf("Enter the No: of Vertices:\n");
8      scanf("%d",&n);
9
10     printf("Enter the Adjacency Matrix:\n");
11     for(i=0;i<n;i++)
12     {
13         for(j=0;j<n;j++)
14             scanf("%d",&a[i][j]);
15     }
16
17     for(i=0;i<n;i++){
18         indegree[i]=0;
19         flag[i]=0;
20     }
21
22     for(i=0;i<n;i++)
23         for(j=0;j<n;j++)
24             indegree[i]=indegree[i]+a[j][i];
25
26     printf("\nThe topological order is:");
27
28     while(count<n){
29         for(k=0;k<n;k++){
30             if((indegree[k]==0) && (flag[k]==0)){
31                 printf("%d ",(k+1));
32                 flag[k]=1;
33             }
34
35             for(i=0;i<n;i++){
36                 if(a[i][k]==1)
37                     indegree[i]--;
38             }

```

```

10 printf("Enter the Adjacency Matrix:\n");
11 for(i=0;i<n;i++)
12 {
13     for(j=0;j<n;j++)
14         scanf("%d",&a[i][j]);
15 }
16
17 for(i=0;i<n;i++){
18     indegree[i]=0;
19     flag[i]=0;
20 }
21
22 for(i=0;i<n;i++)
23     for(j=0;j<n;j++)
24         indegree[i]=indegree[i]+a[j][i];
25
26 printf("\nThe topological order is:");
27
28 while(count<n){
29     for(k=0;k<n;k++){
30         if((indegree[k]==0) && (flag[k]==0)){
31             printf("%d ",(k+1));
32             flag[k]=1;
33         }
34
35         for(i=0;i<n;i++){
36             if(a[i][k]==1)
37                 indegree[k]--;
38         }
39     }
40     count++;
41 }
42
43 return 0;
44 }
45
46

```