

```
1  #include<stdio.h>
2      int temp[10],k=0;
3
4  void topo(int n,int indegree[10],int a[10][10])
5  {
6      int i,j;
7
8      for(i=1;i<=n;i++)
9      {
10
11          if(indegree[i]==0)
12          {
13              indegree[i]=1;
14              temp[++k]=i;
15              for(j=1;j<=n;j++)
16              {
17                  if(a[i][j]==1&&indegree[j]!=-1)
18                      indegree[j]--;
19              }
20              i=0;
21          }
22      }
23
24  void main()
25  {
26      int i,j,n,indegree[10],a[10][10];
27      printf("enter the number of vertices:");
28      scanf("%d",&n);
29      for(i=1;i<=n;i++)
30      indegree[i]=0;
```



```
24 void main()
25 {
26     int i,j,n,indegree[10],a[10][10];
27     printf("enter the number of vertices:");
28     scanf("%d",&n);
29     for(i=1;i<=n;i++)
30         indegree[i]=0;
31
32     printf("\n enter the adjacency matrix\n");
33     for(i=1;i<=n;i++)
34         for(j=1;j<=n;j++)
35         {
36             scanf("%d",&a[i][j]);
37             if(a[i][j]==1)
38                 indegree[j]++;
39         }
40
41     topo(n,indegree,a);
42
43     if(k!=n)
44         printf("topological ordering is not possible\n");
45
46     else
47     {
48         printf("\n topological ordering is :\n");
49         for(i=1;i<=k;i++)
50             printf("v%d\t",temp[i]);
51     }
52 }
53
```



enter the number of vertices:5

enter the adjacency matrix

0 1 1 0 0

0 0 0 1 0

0 0 0 1 0

0 0 0 0 1

0 0 0 0 0

topological ordering is :

v1

v2

v3

v4

v5

...Program finished with exit code 5

Press ENTER to exit console.