Topological ordering:

```
#include <stdio.h>
int temp[10], k = 0;

void topo(int n, int indegree[10], int a[10][10])
{
    int i, j;
    for (i = 1; i <= n; i++)
    {
        if (indegree[i] == 0)
        {
            indegree[i] = 1;
            temp[++k] = i;
            for (j = 1; j <= n; j++)
            {
                if (a[i][j] == 1 && indegree[j] != -1)
                    indegree[j]--;
            }
            i = 0;
        }
    }
}

void main()
{
    int i, j, n, indegree[10], a[10][10];
    printf("enter the number of vertices:");
    scanf("%d", &n);
    for (i = 1; i <= n; i++)
        indegree[i] = 0;

    printf("Enter the adjacency matrix\n");
    for (i = 1; i <= n; i++)
        for (j = 1; j <= n; j++)
        {
            scanf("%d", &a[i][j]);
            if (a[i][j] == 1)
                indegree[j]++;
        }

    topo(n, indegree, a);
```

```c
if (k != n)
        printf("Topological ordering is not possible\n");

    else
    {
        printf("Topological ordering is :\n");
        for (i = 1; i <= k; i++)
            printf("v%d   ", temp[i]);
    }
}
```

OUTPUT:

```
User@PRATHIKSHA /c/ada lab
$ cd "/c/ada lab/" && gcc topological_ordering.c -o topological_ordering && "/c/ada lab/"topological_ordering
enter the number of vertices:4
Enter the adjacency matrix
0 1 1 0
0 0 0 1
0 0 0 1
0 0 0 0
Topological ordering is :
v1   v2   v3   v4
```