

TOPOLOGICAL\_SORT PROGRAM :-

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int a[20][20],rem[20],ind,n,i,j,flag=0,t=0;
    printf("\nEnter the value of n ");
    scanf("%d",&n);
    printf("\nEnter the adjacency matrix ");
    for(i=0;i<n;i++)
    {
        rem[i]=0;
        for(j=0;j<n;j++)
        {
            scanf("%d",&a[i][j]);
        }
    }
    while(flag==0)
    {
        flag=1;
        for(i=0;i<n;i++)
        {
            if(rem[i]==0)
            {
                ind=0;
                for(j=0;j<n;j++)
                {
                    if(!(rem[j]==1 || a[j][i]==0))
                    {
                        ind=1;
                        break;
                    }
                }
            }
        }
    }
}
```

```

    }
    }
    if(ind==0)
    {
        printf("%s",t=="0?"\nTopological ordering is ":"");
        rem[i]=1;
        printf("%d ",i+1);
        flag=0;
        t++;
        break;
    }
}
}
if(t!=n)
{
    printf("\nTopological ordering is not possible(it can only be partially ordered!!");
}
getch();
}

```

OUTPUT:-

```

Enter the value of n 5

Enter the adjacency matrix
0 0 1 0 0
0 0 1 0 0
0 0 0 0 1
0 0 0 0 1
0 0 0 0 0

Topological ordering is 1 2 3 4 5

...Program finished with exit code 0
Press ENTER to exit console.

```