main.c

```c
#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;
}
}
}
int 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("\n 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);
if(k!=n)
printf("topological ordering is not possible\n");
else
{
printf("\n topological ordering is :\n");
for(i=1;i<=k;i++)
printf("v%d\t",temp[i]);
} }
```

```
> clang-7 -pthread -lm -o main main.c
> ./main
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  >
```