Design and implement C/C++ Program to obtain the Topological ordering of vertices in a given digraph.

#include <stdio.h>

void readgraph(int n,int a[10][10])

{

int i,j;

for(i=0;i<n;i++)

{

for(j=0;j<n;j++)

scanf("%d", &a[i][j]);

}

}

void find\_indegree(int n, int a[10][10], int indegre[])

{

int i,j,sum;

for(j=0;j<n;j++)

{

sum=0;

for(i=0;i<n;i++)

sum+=a[i][j];

indegre[j]=sum;

}

}

void topological\_sort(int n, int a[10][10])

{

int i, k, u, v, top, t[10],indegre[10],s[10];

find\_indegree(n,a,indegre);

top=-1;

for(i=0;i<n;i++)

{

if(indegre[i]==0) s[++top]=i;

}

while(top!=-1)

{

u=s[top--];

t[k++]=u;

for(v=0;v<n;v++)

{

if(a[u][v]==1)

{

indegre[v]--;

if(indegre[v]==0)

{

s[++top]=v;

}

}

}

}

printf("The topological sort sequence is: ");

for(i=0;i<n;i++)

printf("%d",t[i]);

}

void main()

{

int n, a[10][10];

printf(" \n Enter number of values");

scanf("%d",&n);

printf("\n Enter adjacency matrix");

readgraph(n,a);

topological\_sort(n,a);

}