BCSL404

```
#include<stdio.h>
void findindegree(int [10][10],int[10],int);
void topological(int,int [10][10]);
void main ()
{
int a[10][10],i,j,n;
printf("Enter the number of nodes:"); scanf("%d",&n);
printf("\nEnter the adjacency matrix\n");
for(i=1;i \le n;i++)
for(j=1;j<=n;j++)
scanf("%d",&a[i][j]);
printf("\nThe adjacency matirx is:\n"); for(i=1;i<=n;i++)</pre>
for(j=1;j<=n;j++)
printf("%d\t",a[i][j]);
printf("\n");
topological(n,a);
void find indegree(int a[10][10],int indegree[10],int n)
int i,j,sum; for(j=1;j \le n;j++)
sum=0;
for(i=1;i \le n;i++)
sum=sum+a[i][j];
indegree[j]=sum;
void topological(int n,int a[10][10])
int k,top,t[100],i,stack[20],u,v,indegree[20];
 k=1;
top=-1;
```

DAA LAB BCSL404

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findindegree(a,indegree,n);
for(i=1;i<=n;i++)
{
if(indegree[i]==0)
stack[++top]=i;
while(top!=-1)
u=stack[top--]; t[k++]=u;
for(v=1;v<=n;v++)
if(a[u][v]==1)
indegree[v]--;
if(indegree[v]==0)
stack[++top]=v;
}}
}}
printf("\nTopological sequence is\n");
for(i=1;i<=n;i++)
printf("%d\t",t[i]);
```