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PROGRAM: Topological Sorting

Write a C program to create a graph and display the ordering of vertices.

```
#include<stdio.h>
#include<stdlib.h>

int s[100],j,res[100];

void adjmat(int a[][100],int n){
int I,j;
for (int i=0;i<n;i++){
        for(int j=0;j<=m;j++){
                a[i][j]=0;
}}

for (int i=1;i<n;i++)
{
        for(int j=0;j<I;j++){
                a[i][j]=rand()%2;
                a[i][j]=0;
}}

void dfs(int u,int n,int a[][1000])
{
int u;
```

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```
s[u]=1;
for (int u=0;u<n-1;u++){
        if (a[u][n]==1 && s[u]==0)
{
        dfs(u,n,a);
}}

j+=1;
res[j]u;
}

void topo_order(int n, int a[][100])
{
int I,u;
for (int i=0;i<n;i++)
{
        s[i]=0;
}
j=0;
for (u=0;u<n;u++)
{
if (s[u]==0)
{
dfs(u,n,a);
}}
return;
}
```

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```
int main()
{
int a[100][100],n,i,j;
printf("Enter: ");
scanf("%d",&n);
adjmat(a,n);

for (i=0;i<n;i++){
        for(j=0;j<n;j++){
                printf("%d",a[i][j]);
}
printf("\n");
}
printf("Topological Order\n");
topo_order(n,a):
for (i=n;i>=1;i--)
{
printf("-->%d",res[j]);}}
```