LAB 6- TOPOLOGICAL SORT

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4-D

```
#include <stdio.h>

int main(){
        int i,j,k,n,a[10][10],indeg[10],flag[10],count=0;

        printf("Enter the no of vertices:\n");
        scanf("%d",&n);

        printf("Enter the adjacency matrix:\n");
for(i=0;i<n;i++){                       printf("Enter row
%d\n",i+1);
                        for(j=0;j<n;j++)
scanf("%d",&a[i][j]);
        }

        for(i=0;i<n;i++){
      indeg[i]=0;
flag[i]=0;
   }

   for(i=0;i<n;i++)
for(j=0;j<n;j++)
indeg[i]=indeg[i]+a[j][i];
```

```
printf("\nThe topological order
is:");


   while(count<n){
for(k=0;k<n;k++){
if((indeg[k]==0) && (flag[k]==0)){
printf("%d ",(k+1));              flag [k]=1;
          }


          for(i=0;i<n;i++){
if(a[i][k]==1)
indeg[k]--;
          }
       }


       count++;
   }


   return 0;
}
```