LAB 5- ITOPOLOGICAL 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;
}
```