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EX NO: 12
PROGRAM NAME: TOPOLOGICAL SORTING

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CODE:

```c
#include<stdio.h>

# define SIZE 7

int
G[SIZE][SIZE]={{0,1,0,1,1,0,0},{0,0,1,1,0,0,0},{0,0,0,1,0,0,1},{0,0,0,0,1,1,1},{0,0,0,0,0,1,0},{0,0,0,0,0,0,0},{0,0,0,0,0,1,0}};

int co;

int in[SIZE];

void tsort(){
  indegree();
  int i;
  for(int k=0;k<7;k++){
  for(i=0;i<7;i++){
    if(in[i]==0){
       break;
    }
  }
  printf("%d ",i);
  in[i]=1;
  for(int j=0;j<7;j++){
    if(G[i][j]==1){
```

```
            in[j]=in[j]-1;

        }

    }

    }

}


void indegree(){

    for(int i=0;i<7;i++){

        co=0;

        for(int j=0;j<7;j++){

            if(G[j][i]==1){

                co++;

            }

        }

        in[i]=co;

    }

}
int main(){

    tsort();

}
```

OUTPUT :

0 1 2 3 4 6 5

Process returned 0 (0x0)   execution time : 0.801 s

Press any key to continue.