

## Topological order - BFS

Mod. Arman Singh  
BM19CS089

```
#include <stdio.h>
# void 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 matrix: \n");
    for (i = 0; i < n; i++) {
        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 (" \n 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++;

}

}