

31. Write a C program to Graph traversal using Breadth First Search.

```
#include <stdio.h>

int q[10], front=0, rear=-1, adj[5][5]={0}, visited[5]={0};

void bfs(int s) {

    q[++rear] = s; visited[s] = 1;

    while (front <= rear) {

        int u = q[front++];

        printf("%d ", u);

        for (int v = 0; v < 5; v++)

            if (adj[u][v] && !visited[v]) {

                q[++rear] = v;

                visited[v] = 1;

            }

    }

}

int main() {

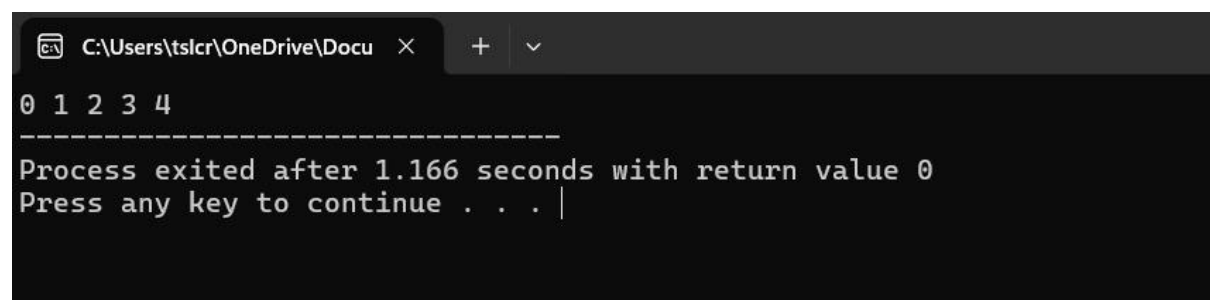
    adj[0][1]=adj[0][2]=adj[1][3]=adj[2][4]=1;

    bfs(0);

    return 0;

}
```

OUTPUT



```
C:\Users\tslcr\OneDrive\Docu  ×  +  v

0 1 2 3 4
-----
Process exited after 1.166 seconds with return value 0
Press any key to continue . . . |
```