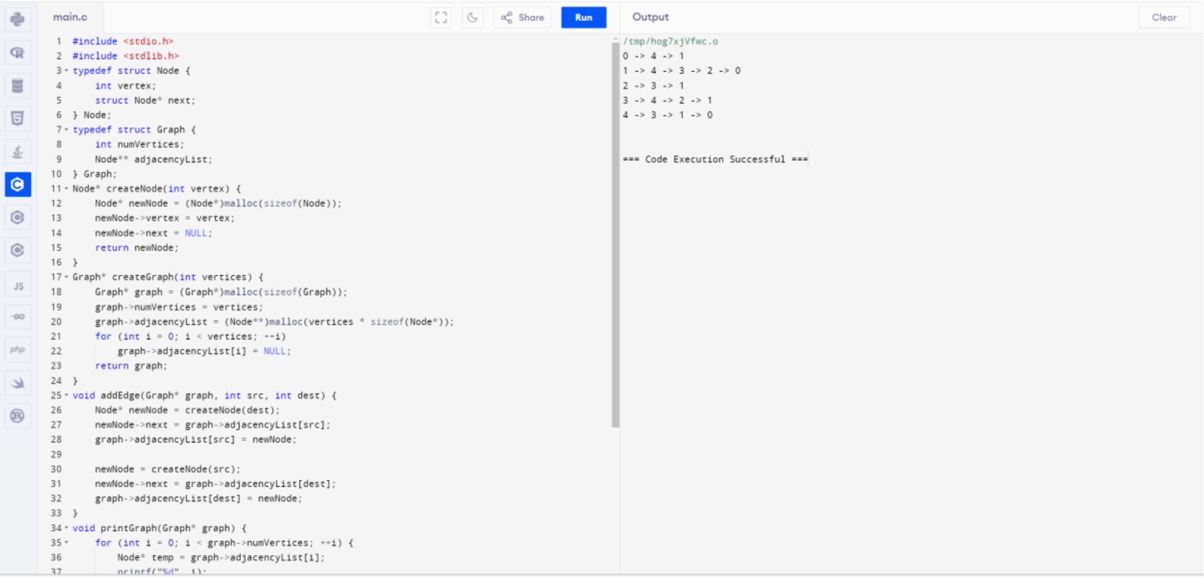
1.Write a c program to evaluate the code for graphs in data structure



```c
#include <stdio.h>
#include <stdlib.h>
typedef struct Node {
    int vertex;
    struct Node* next;
} Node;
typedef struct Graph {
    int numVertices;
    Node** adjacencyList;
} Graph;
Node* createNode(int vertex) {
    Node* newNode = (Node*)malloc(sizeof(Node));
    newNode->vertex = vertex;
    newNode->next = NULL;
    return newNode;
}
Graph* createGraph(int vertices) {
    Graph* graph = (Graph*)malloc(sizeof(Graph));
    graph->numVertices = vertices;
    graph->adjacencyList = (Node**)malloc(vertices * sizeof(Node*));
    for (int i = 0; i < vertices; ++i)
        graph->adjacencyList[i] = NULL;
    return graph;
}
void addEdge(Graph* graph, int src, int dest) {
    Node* newNode = createNode(dest);
    newNode->next = graph->adjacencyList[src];
    graph->adjacencyList[src] = newNode;

    newNode = createNode(src);
    newNode->next = graph->adjacencyList[dest];
    graph->adjacencyList[dest] = newNode;
}
void printGraph(Graph* graph) {
    for (int i = 0; i < graph->numVertices; ++i) {
        Node* temp = graph->adjacencyList[i];
        printf("%d", i);
```

```
/tmp/hog7xjVfwc.o
0 -> 4 -> 1
1 -> 4 -> 3 -> 2 -> 0
2 -> 3 -> 1
3 -> 4 -> 2 -> 1
4 -> 3 -> 1 -> 0


=== Code Execution Successful ===
```