

9(b)DFS program

The screenshot shows the Visual Studio Code interface with the following details:

- File Explorer:** Shows files like `krishna.c`, `hashcc.c`, `dfs.c`, `bfs.c`, and `G/C++: generate build...`.
- Code Editor:** Displays the `dfs.c` file content:#include <stdio.h>
#define MAX 20
int n;
int adj[MAX][MAX];
int visited[MAX];
/* DFS Function */
void DFS(int v)
{
 visited[v] = 1;
 for (int i = 0; i < n; i++)
 {
 if (adj[v][i] == 1 && visited[i] == 0)
 {
 DFS(i);
 }
 }
}
int main()
{
 int i, j, connected = 1;
 printf("Enter number of vertices: ");
 scanf("%d", &n);
 printf("Enter adjacency matrix:\n");
 for (i = 0; i < n; i++)
 {
 for (j = 0; j < n; j++)
 {
 scanf("%d", &adj[i][j]);
 }
 }
 visited[0] = 0; // Initialize visited array
 // Perform DFS starting from vertex 0
 DFS(0);
 // Check if all vertices are visited
 for (i = 0; i < n; i++)
 {
 if (visited[i] == 0)
 {
 connected = 0;
 break;
 }
 }
 if (connected)
 printf("The given graph is CONNECTED\n");
 else
 printf("The given graph is NOT CONNECTED\n");
 return 0;
}
- Terminal:** Shows the terminal output of the program execution:Enter number of vertices: 4
Enter adjacency matrix:
0 1 1 0
1 0 1 1
1 1 0 1
0 1 1 0
The given graph is CONNECTED
PS C:\Users\krishna\Documents\GitHub\krishna> ./dfs.exe
Enter number of vertices: 4
Enter adjacency matrix:
0 1 0 0
1 0 0 0
0 0 0 0
0 0 0 0
The given graph is NOT CONNECTED
PS C:\Users\krishna>
- Bottom Status Bar:** Shows system information: 18°C, Sunny, Le 34 Col 10, Spacebar 4, Shift 8, Ctrl 1, Alt 1, Insert 1, Win32.

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Get-ChildItem -Path "C:\Windows\Microsoft\NETEngine\Error\NvGdb\bin" | %{\$_.FullName} | > C:\Windows\Microsoft\NETEngine\NvGdb\bin\NvGdb.exe --interpreter=ei
PS C:\Users\krishna> ./dfs.exe
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