EXPERIMENT [22](DFS tree)

CODE:

#include <stdio.h>

#define SIZE 5

int visited[SIZE] = {0};

void dfs(int graph[SIZE][SIZE], int node) {

printf("%d ", node);

visited[node] = 1;

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

if (graph[node][i] == 1 && visited[i] == 0) {

dfs(graph, i); // Recursive call for unvisited adjacent nodes

}

}

}

int main() {

int graph[SIZE][SIZE] = {

{0, 1, 1, 0, 0},

{1, 0, 1, 1, 0},

{1, 1, 0, 0, 1},

{0, 1, 0, 0, 1},

{0, 0, 1, 1, 0}

};

printf("DFS Traversal: ");

dfs(graph, 0); // Start DFS from node 0

return 0;

}

OUTPUT:

