23.Write a C program to Graph traversal using Depth First Search

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#include <stdio.h>
#define MAX 20
int adj[MAX][MAX];
int visited[MAX];
int n;
void dfs(int vertex) {
   int i;
   visited[vertex] = 1;
   printf("%d ", vertex);
   for (i = 0; i < n; i++) {
      if (adj[vertex][i] == 1 && visited[i] == 0) {
         dfs(i);
      }
   }
}
int main() {
   int i, j, start;
   printf("Enter the number of vertices: ");
   scanf("%d", &n);
   printf("Enter the adjacency matrix:\n");
   for (i = 0; i < n; i++) {
      for (j = 0; j < n; j++) {
         scanf("%d", &adj[i][j]);
      }
   }
   for (i = 0; i < n; i++)
      visited[i] = 0;
   printf("Enter the starting vertex (0 to %d): ", n - 1);
   scanf("%d", &start);
```

```
    printf("DFS Traversal: ");
    dfs(start);
    printf("\n");
    return 0;
}
```