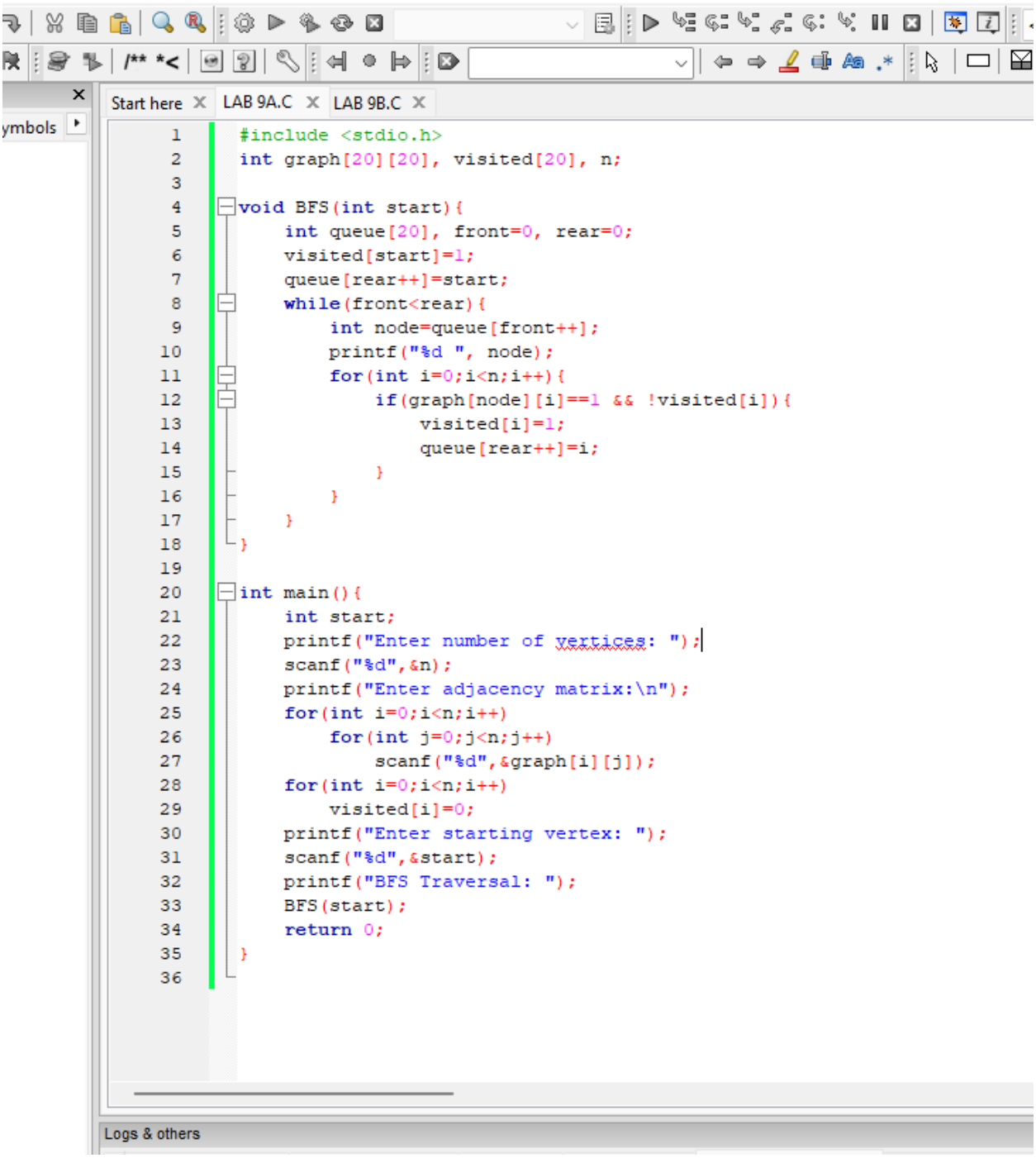
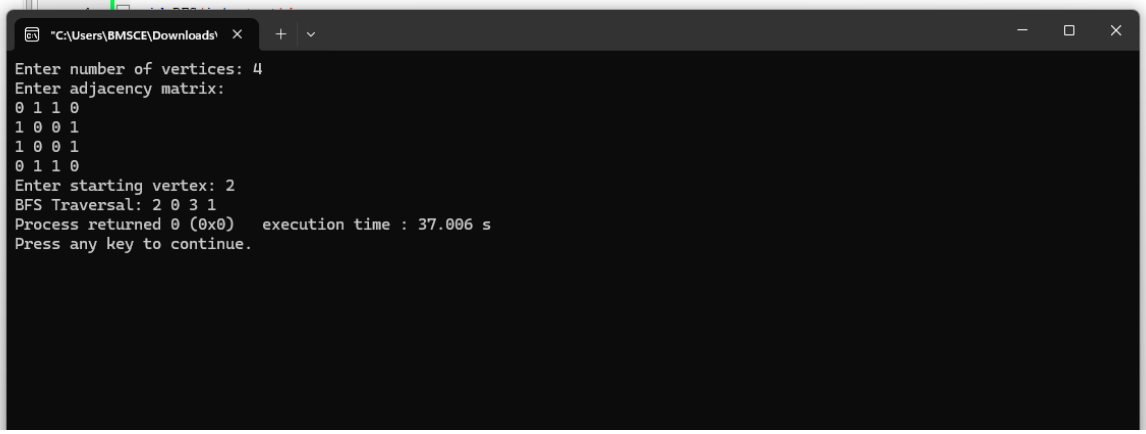
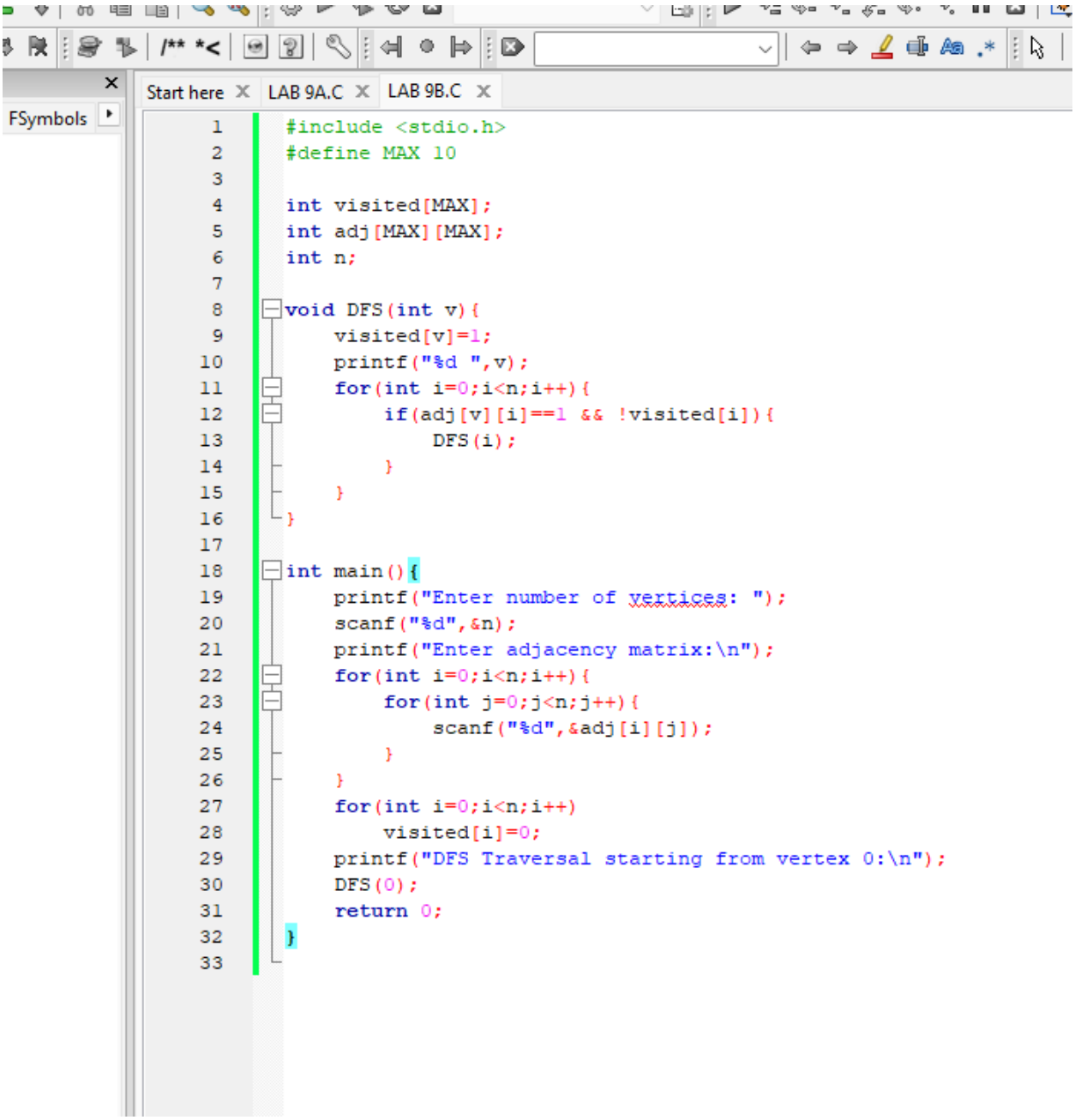
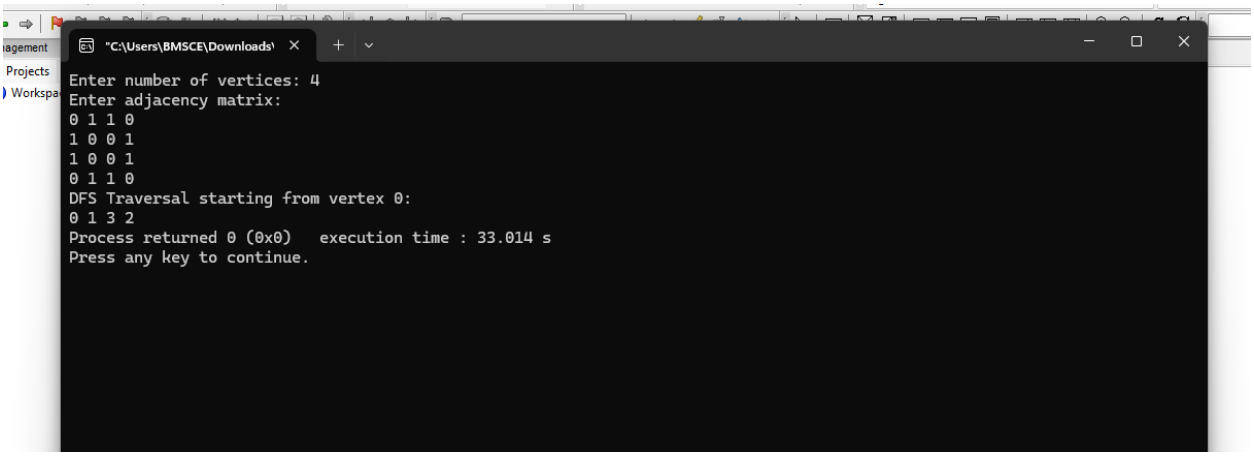
Lab 9A


Start here
LAB 9A.C
LAB 9B.C
ymbols
#include <stdio.h>
int graph[20][20], visited[20], n;
void BFS(int start){
int queue[20], front=0, rear=0;
visited[start]=1;
queue[rear++]=start;
while(front<rear){
int node=queue[front++];
printf("%d ", node);
for(int i=0;i<n;i++){
if(graph[node][i]==1 && !visited[i]){
visited[i]=1;
queue[rear++]=i;
}
}
}
}
int main(){
int start;
printf("Enter number of vertices: ");
scanf("%d",&n);
printf("Enter adjacency matrix:\n");
for(int i=0;i<n;i++)
for(int j=0;j<n;j++)
scanf("%d",&graph[i][j]);
for(int i=0;i<n;i++)
visited[i]=0;
printf("Enter starting vertex: ");
scanf("%d",&start);
printf("BFS Traversal: ");
BFS(start);
return 0;
}
Logs & others

```
2   int graph[20][20], visited[20], n;
3
```




Start here
LAB 9A.C
LAB 9B.C
FSymbols
#include <stdio.h>
#define MAX 10
int visited[MAX];
int adj[MAX][MAX];
int n;
void DFS(int v){
visited[v]=1;
printf("%d ",v);
for(int i=0;i<n;i++){
if(adj[v][i]==1 && !visited[i]){
DFS(i);
}
}
}
int main(){
printf("Enter number of vertices: ");
scanf("%d",&n);
printf("Enter adjacency matrix:\n");
for(int i=0;i<n;i++){
for(int j=0;j<n;j++){
scanf("%d",&adj[i][j]);
}
}
for(int i=0;i<n;i++)
visited[i]=0;
printf("DFS Traversal starting from vertex 0:\n");
DFS(0);
return 0;
}


"C:\Users\BMSCE\Downloads\
Enter number of vertices: 4
Enter adjacency matrix:
0 1 1 0
1 0 0 1
1 0 0 1
0 1 1 0
DFS Traversal starting from vertex 0:
0 1 3 2
Process returned 0 (0x0)   execution time : 33.014 s
Press any key to continue.