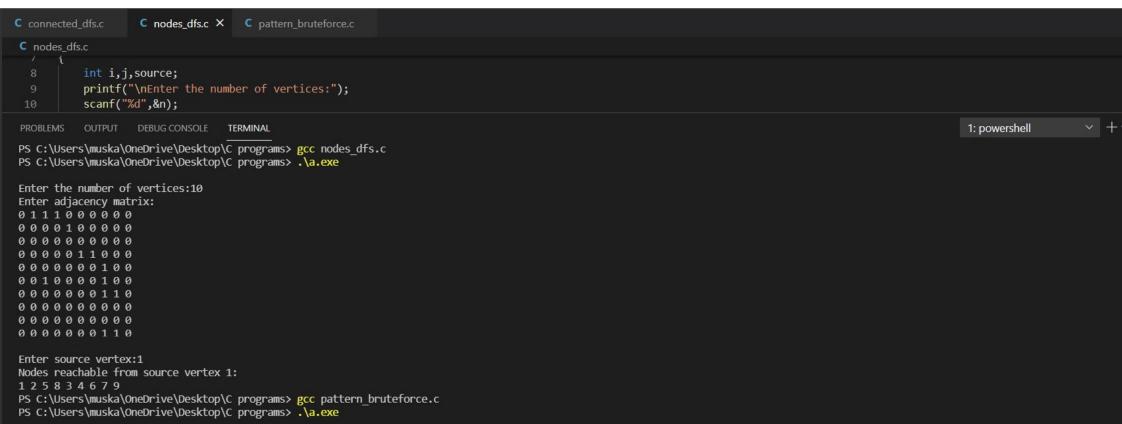
if(arr[v][i]==1 && visit[i]==0)

```
C nodes_dfs.c X C pattern_bruteforce.c
C nodes_dfs.c
         for(i=1;i<=n;i++)
             visit[i]=0;
         printf("\nEnter source vertex:");
         scanf("%d",&source);
         printf("Nodes reachable from source vertex %d:\n",source);
         dfs(source);
         getch();
     void dfs(int v)
         visit[v]=1;
         printf("%d ",v);
         for(i=1;i<=n;i++)
             if(arr[v][i]==1 && visit[i]==0)
                 dfs(i);
```



```
C connected_dfs.c X C nodes_dfs.c
C connected_dfs.c
      #include<stdio.h>
      #include<conio.h>
      void dfs(int);
      int arr[20][20], visit[20], n;
      void main()
          int i,j,source,count=0;
          printf("\nEnter the number of vertices:");
          scanf("%d",&n);
          printf("Enter adjacency matrix:\n");
          for(i=1;i<=n;i++)
              for(j=1;j<=n;j++)
                  scanf("%d",&arr[i][j]);
          for(i=1;i<=n;i++)
              visit[i]=0;
          printf("\nEnter source vertex:");
          scanf("%d",&source);
          printf("Nodes reachable from source vertex %d:\n", source);
          dfs(source);
          for(i=1;i<=n;i++)
              if(visit[i]==1)
                  count++;
          if(count==n)
              printf("\nGraph is connected");
```

```
C connected_dfs.c X
C connected_dfs.c
          scanf("%d",&source);
          printf("Nodes reachable from source vertex %d:\n",source);
          dfs(source);
          for(i=1;i<=n;i++)
              if(visit[i]==1)
                  count++;
          if(count==n)
              printf("\nGraph is connected");
              printf("\nGraph is not connected");
          getch();
      void dfs(int v)
          visit[v]=1;
          printf("%d ",v);
          for(i=1;i<=n;i++)
              if(arr[v][i]==1 && visit[i]==0)
                  dfs(i);
```

```
C connected dfs.c X C nodes dfs.c
C connected_dfs.c
          visit[v]=1;
          printf("%d ",v);
          for(i=1;i<=n;i++)
              if(arr[v][i]==1 && visit[i]==0)
                  dfs(i);

→ + → □ 

□

                                                                                                                                                       1: powershell
                  DEBUG CONSOLE TERMINAL
Graph is not connected
PS C:\Users\muska\OneDrive\Desktop\C programs> gcc connected_dfs.c
PS C:\Users\muska\OneDrive\Desktop\C programs> .\a.exe
Enter the number of vertices:5
Enter adjacency matrix:
00011
00011
00000
11000
11000
Enter source vertex:1
Nodes reachable from source vertex 1:
1425
Graph is not connected
PS C:\Users\muska\OneDrive\Desktop\C programs> gcc nodes_dfs.c
PS C:\Users\muska\OneDrive\Desktop\C programs> .\a.exe
```