

# Program

August 19, 2020

## 1 About the program

This program reads a certain description of an undirected graph and determines the number of connected components of it.

### 1.1 About the description of the graph

The graph shall be read from a file. The file describes the graph by way of specifying the number of nodes, the number of edges and a description of what nodes each edge connects.

#### 1.1.1 Syntax

The input file consists only of a series of arbitrarily space- separated integer constants written in plain ASCII, and consequently, also readable as an UTF-8 plain text file.

The first two integers shall be the number of nodes ( $n$ ), and the number of edges ( $m$ ), respectively.

Given this, the set of nodes is assumed to be 1, 2, ...  $n$ , and each node will be referred simply by its number.

Then comes " $m$ " pairs of integers " $u$ " and " $v$ " each giving the existence of a bidirectional edge between nodes " $u$ " and " $v$ ".

## 2 The program

As this program will be considerably small, it will consist of a single source file in which we will put all of our code.

*source/app.d* The one and only source

*source/app.d*

```
void main()
{
```

```
    <Content of main>  
}
```

*Content of main*

*Content of main*

```
return;
```