Lab 8.8.6.1 Preprocessing: part 1

Objectives

Familiarize the student with:

- The preprocessor
- Disjoint compilation
- Header files
- Printing on screen

Scenario

Do you remember the lab from chapter 6.8.13? Take the sources from that lab and modify them. Add *#define* and *#ifndef* in the header file (triangles.h) to avoid multiplied compilations. Add a macro to log information to the screen, call this macro before each function call, and pass the name of the function into the macro. The macro should get the line and file name from the other macros. Your version of the program must print the same result as the expected output.

```c
 #include <stdio.h>
/* your code that includes a header*/

int main()
{
 /* your code */
 return 0;
}
/* other files with your code */
```

Example input

5

Example output

```
In line 13, file path\main.c, before the normalTriangle function

\
\\
\\\
\\\\
In line 15, file path\main.c, before the floydsTriangle function

   1
   2   3
   4   5   6
   7   8   9  10
```

Example input

3

Example output

```
3
In line 13, file path\main.c, before the normalTriangle function

\
\\
In line 15, file path\main.c, before the floydsTriangle function

   1
   2   3
```

```c
 #include <stdio.h>
/* your code that includes a header*/

int main()
{
```