

## Assignment 2

### Description:

Program takes as input the Cars that reach a Narrow Bridge Controls which Car on each side of Bridge should Cross the Bridge.

### Compilation:

Program uses the pthread.h library so the linker of the compiler (gcc) needs specific arguments to compile.

- -lpthread for pthread.h

Run make command in terminal to make executable file.

- First: compiles separately the file  
→ bridge.c that uses pthread library and math library
- Creates a second file “bridge.o” which is “bridge.c”
- Creates an executable file “bridge”

### Test Cases:

To test the program we are using the following files :

- input\_1.txt
- input\_2.txt
- input\_3.txt
- input\_4.txt

### Execution:

The executable file takes as Arguments the number of Threads that should be used and the Test File we are checking.

So the command to execute the program is :

`./bridge <max_capacity_of _Bridge> <test_file`