## **AVENGERS – Battle of Pintos!**

The Avengers were desperately trying to stop Loki from creating mayhem in the land of Pintos!

Loki had secretly created a file in src/tests/threads called "hello-one.c" which could be used for 2 purposes :

- 1. Nuke Pintos! (BOOOM!)
- 2. Abort Mission.. (and fly off to Asgard, his home place)

Agent Romanoff managed to trick Loki and retrieved the file "hello-one.c" which is shown below:

She shared the above file with Tony Stark and Dr. Bruce Banner and finally the Avengers planned to create a file called "haha-one.c" which would somehow call the function test\_hello\_one() created by Loki and pass 666 as the secret parameter x and thus force Loki to fly off to Asgard.

## TASK1:

Shown below is the incomplete file called "haha-one.c" created by Dr. Bruce and Tony.

Your task is to complete the function test\_haha\_one() so that land of Pintos remains safe for your next assignment :P

```
#include <stdio.h>
void test_haha_one(void)
{
```

## TASK2:

Now that you have created "haha-one.c" successfully, Captain America is given the job of placing the file in correct location (src/tests/threads) and thus make necessary changes in tests.c, tests.h and Make.tests files (All of which reside in src/tests/threads).

But wait! Here is a big goof-up. Since Captain is a man out-of-time, he accidentally places the "haha-one.c" in the pintos folder (i.e \$HOME/pintos).

Hawkeye finally comes to the rescue and makes the last change required in Make.tests file to cover up Captain's mistake.

Nick Fury - "You have half an hour to accomplish the task and bring victory and joy in the land of Pintos, before Loki nukes down the whole city..

Good Luck Avengers!"

## **BONUS TASK:**

```
SeaBIOS (version 0.6.2-20110519_204143-rothera)
Booting from Hard Disk...
PiLo hda1
Loading.....
Kernel command line: run haha-one
Pintos booting with 4,096 kB RAM...
383 pages available in kernel pool.
383 pages available in user pool.
Unexpected interrupt 0x24 (unknown)
Calibrating timer... 838,041,600 loops/s.
Boot complete.
Executing 'haha-one':
(haha-one) begin
Spiderman in Asgard??! Heaven's sake, I need to abort this mission and fly off t
o my home.. :(
(haha-one) end
Execution of 'haha-one' complete.
****AUENGERS ASSEMBLE!****
```

Where would you make change(s) so that the \*\*\*\*AVENGERS ASSEMBLE!\*\*\*\* signature is displayed as shown in the above screenshot!?

# Note:

- 1. All the tasks require very few modifications and are covered as part of your first assignment
- 2. Do not Copy.
- 3. You have access to your laptops/machines, so pintos source code is available to you.