HW4

April 5, 2020

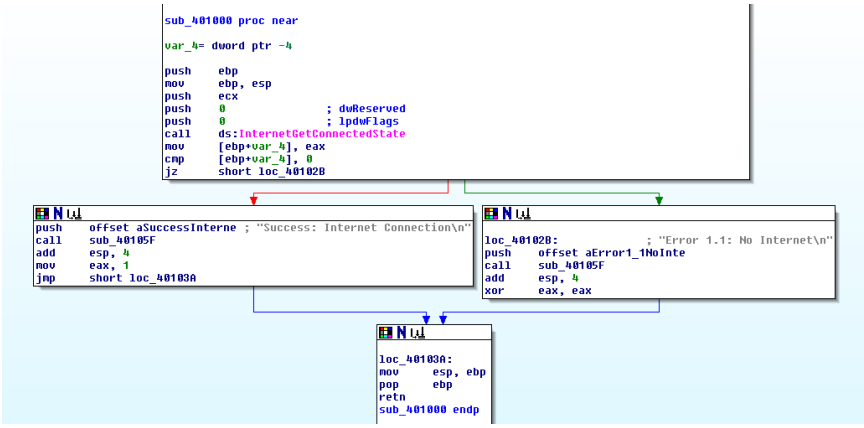
Contents

Questions

1 Lab 6-1

1.1 Question 1

Checks to see if there is an internet connection present, and printing a message accordingly.



1.2 Question 2

It appears to be some sort of printing function.

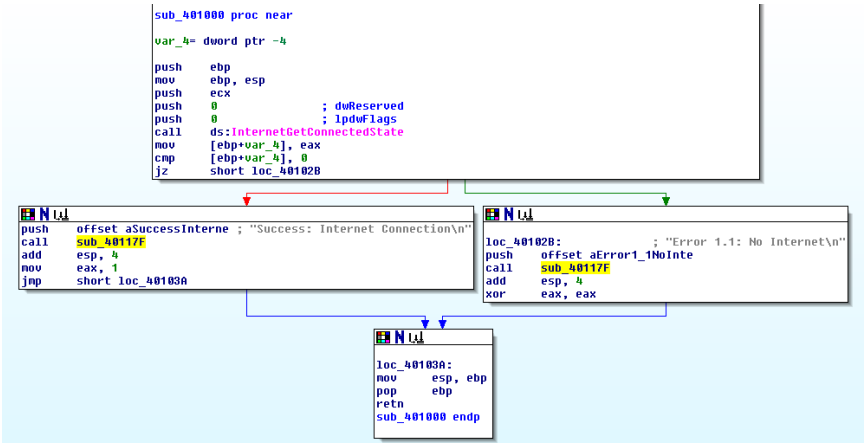
1.3 Question 3

It returns with exit code 1 if there is no internet connection, else 0.

2 Lab 6-2

2.1 Question 1

Same as Lab 6-1.



2.2 Question 2

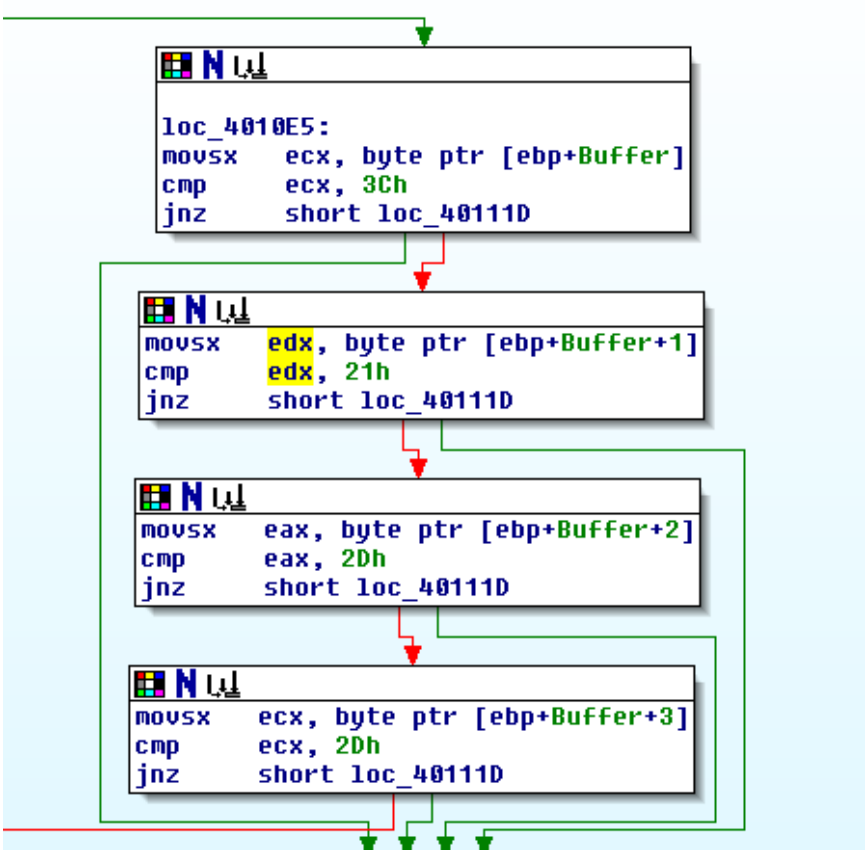
Same as Lab 6-1.

2.3 Question 3

It reads the contents of the page `http://www.practicalmalwareanalysis.com/cc.htm` into a buffer.

2.4 Question 4

Looks like an unrolled loop, looking for a string beginning with `<!--`, which is the start of an HTML comment.



2.5 Question 5

The program checks the internet connection, and if connected makes a request to `http://www.practicalmalwareanalysis.com/cc.htm`.

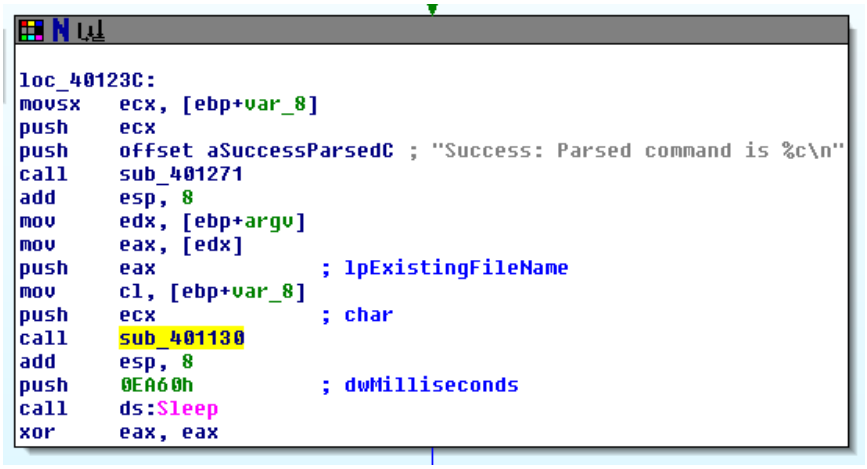
2.6 Question 6

It checks the internet connection, and if so prints out a byte as a "command" from an HTML comment on a webpage, then sleeps and exits.

3 Lab 6-3

3.1 Question 1

There's a new subroutine that does something with the command instead of just exiting.

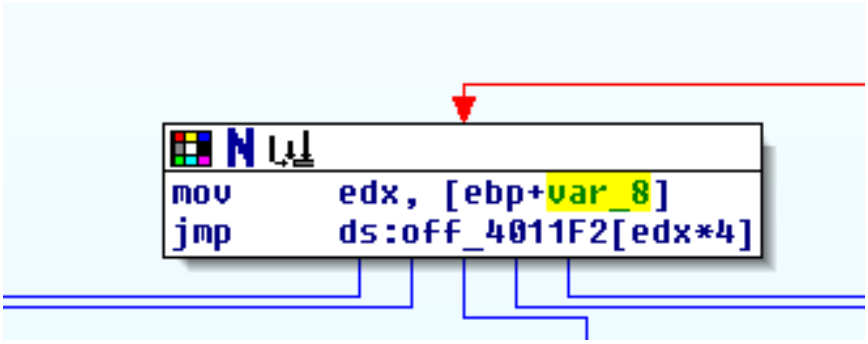


3.2 Question 2

A filename and a buffer. In this case it's called with the path of the running program, and the command.

3.3 Question 3

Looks like a jump table based on the command.



3.4 Question 4

It can do 5 different things depending on the command, either create a directory `C:\Temp`, copy itself to `C:\Temp\cc.exe`, delete `C:\Temp\cc.exe`, add `C:\Temp\cc.exe` to the startup registry key, or sleep and exit.

3.5 Question 5

It can create the file `C:\Temp\cc.exe` or the registry key `Software\Microsoft\Windows\CurrentVersio`

3.6 Question 6

The program makes sure there is an internet connection, then reads a command from a command and control server, then does some various things based on the command.

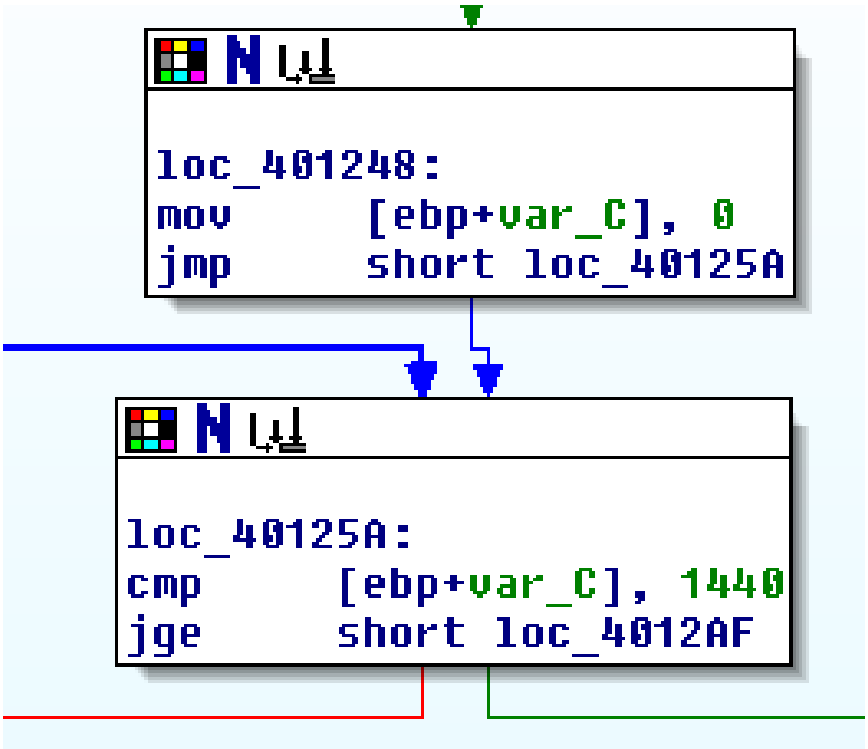
4 Lab 6-4

4.1 Question 1

The command parsing function has a new argument.

4.2 Question 2

A loop has been added around the main body.



4.3 Question 3

It now uses the loop counter in the user agent used to make the request to the webpage.

4.4 Question 4

The main loop runs 1440 times, each loop sleeping 60 seconds plus any network request time, so for around 1 day.

4.5 Question 5

The user agent is different this time.

4.6 Question 6

Same as the last one, except it now executes commands repeatedly instead of just once.