Assignment 3: Investigating a File System

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Procedure:

I first looked up how a FAT16 File system is set up. I learned that specific bytes in the boot block tell you the information I needed for questions 1 through 7. I then found a chart that tells you the byte offset of the aforementioned bytes. This allowed me to extract them. Since they were in little-endian form I had to reverse them. Then for questions 8 through 12, I just had to use the information I had just extracted to perform rudimentary math to solve the questions.

Usage:

You will need python 2.7 to run my program.

In the directory containing the file "Image.img", run the following command:

python fat16_investigator.py Image.img

The relevant information will be printed to the console.

References:

Lused

"https://technet.microsoft.com/en-us/library/cc776720%28v=ws.10%29.aspx?f=255&MS PPError=-2147217396" for its byte offset chart.

And I used "http://home.teleport.com/~brainy/fat16.htm" for its FAT16 drive layout chart.

Bonus:

I was able to extract a .jpg image of a very cute cat and a trick or treat picture with 3 pumpkins.