Assignment 1: File Carving

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Procedure

First thing I did was search for a hex editor on google. I found one called HxD which suited my needs pretty well. I then decoded the file from base 64 with python and output the result. With the hex editor I was able to locate the different headers and footers of the separate files. In my program I then listed out all the headers and footers to use in the main function. The function "findFile" just iterates through the file searching for the header. Once the header is found it then iterates from the headers location until it finds the footer. Then the section specified with the indexes of the header and footer is cut out and returned. Finally the cut out data is output with the correct file extension to create the file.

My PDF doesn't seem to match the PDF hash. Don't know why that is if everything else matches and the PDF opens fine.

Usage

You will need python 2.7 to run my program. In the directory with the corrupted file. Use the following command:

python file_carving corrupted.docx

The files will be created in the same directory.

Bonus

I found the bonus file by just looking at the acii after the png file. The "troll34LOL" kinda gave away its position. But, I had looked through a ton of file headers earlier and recognized "PK..." Then, since from googling it seemed zips maybe don't have the usual footer (to my knowledge) I just used the end of the file and it worked.