File Carver
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About:
- This program utilizes regular expressions to pick out the various filetype magic numbers and output them into their respective files.
- I used HxD to search various filetypes, specifically jpeg, pdf, gif, and png, for their header and footer tags.
- After grabbing those tags, I just created the regular expressions to find every instance within the file that starts with the header and end with the footer magic numbers.
- To make the regular expressions work simpler, I used the binascii library to "hexlify" the file so that the file text became raw hex. Then after searching, I dehexlified it and output it to the specific filetype.
- Inititally I used the base64 library to decode it from base64 to ascii.

HowTo:
1. The program is setup to carve any file you give it as an input. For our case we will use "corrupted.docx". When prompted, just type "corrupted.docx" (make sure it is in same directory as file_carving.py)
2. It will then ask if the file is in base64 to know whether it needs to decode it. Type "yes".
3. It will then search through and output the files into the working directory.(jpeg, gif, pdf,png)