Exercise 3: Hex Editor - Match File Remnants

Hex editors can do more. Suppose a criminal creates a Word doc, emails it to the victim, and then the criminal deletes the Word document. If we can find remnants (partial sections of this document left after deleting the file that haven't been overwritten yet), we can tie the criminal to the victim's document.

The book shows how to do this using WinHex. You're welcome to use WinHex, but you might try ImHex - it's new and free.

1. Create a Word doc.
2. Use your Hex editor to calculate a hash value (SHA 256 is recommended). Check it with PowerShell.
3. Open "Jefferson Quotes.doc" from the book's Ch09 files and use your hex editor to calculate the hash value for **just the first sector.**

To understand remnants, we need to understand how operating systems store and "delete" a file. Files are stored in parts. When we "delete" a file, we lose the link to the file, but the parts aren't really deleted. The parts are still there, until the associated storage locations get overwritten.

Verify: Include a screen shot clearly showing your Hex Editor **on your machine**with the calculated hash value for just the first sector. Display this screenshot in your README.md file under a second-level heading (use 2 hash marks) and explain a bit about why this is useful.

Always: Include enough desktop or other evidence so we know this is running **on your machine** (and not just a copied screenshot).