

As I played the game and read the prompt for this lab I got familiar with it. Thinking that I am unable to modify this game while it is running, I realized that I can only do it after saving then reopening the game. This is where I chose the SAVED.GAM file to use in my hex editor. I spent a good amount of time getting used to looking at the hex editor and the values. I began changing random hex values one by one to see if anything would happen in the game. After a while, I noticed a pattern for the character stats and how each line contains stats for every character. I also noticed a pattern in the item offsets and how they are somewhere near the 0x200 in my hex editor. Then for the item offsets I turned the current stat into hex and searched for it manually in the hex editor. I found the offsets by identifying the current attribute value inside the game, then converting it to hex, and found it on my hex editor. For example, the strength of my character is 99 so I made the offset 63 on 0x0E. From there, I noticed a pattern and changed all the stats of all 16 characters. Every 32 bits is one character. In the end, for each character I changed their level to 99, strength to 99, intelligence to 99, dexterity to 99, HP/MH to 999, and EXP to 9999.