**Report**

I enjoyed making this program, although it did take a long time and tons of code. I’m not sure if there was an easier way (probably was), but this was the way I made mine, and I was able to comprehend it better this way. I did have some problems along the way such as being able to load a character and assign the variables from that file correctly. I have a friend that is into game design and he was able to help me over Skype when I had to troubleshoot. Google was used repeatedly as well. I also had problems with the battle system, so I just skipped that and got around to doing it at the end. The battle system was so tough to beat at first. When I originally made the HP, I made everyone have 100 HP. Then when I went into battle I would never be able to beat everybody. I had made an impossibly hard game! Then I went into the program instructions and saw that I needed to give myself 20 HP and orcs 12. I wasn’t sure if Uruk-hai was supposed to have 12 HP as well, but I gave him 12 because that would make it easier for me. After that, I tested the game and I won first time! After that I was so glad because I had actually made a working, winnable game that anyone could play!

I really enjoyed this class and all the challenges you made us endure. Thank you for teaching me Python, and I hope to see you around. I bid you adieu kind Sir.

**Algorithm**

Import random and os.path

Define character variables (name, race, level, current HP, and potions) as characterData

Define the game variables (damage, max HP, hit chance, however many points health potions heal)

Define isDead as false so the character is seen as alive

Define saveCharacter module from characterData:

Open new file to write the first attribute [0] from characterData for the newly created character

This will name the file after whatever the user names his/her character

Close the file

Define loadCharacter module from characterName:

Opens new file to write the characterName inputted by the user to find if the text file exists

If it does,it loads the character and reads it

Close the file

Then it takes the characterData from the loaded file and assigns the modifiers as they were for that character

Define assignRaceModifiers module from race:

If statement to define if human is picked to change the starting attributes to the modified attributes

Elif statement to define if Elf is picked to “ “

Elif statement to define if Dwarf is picked to “ “

Elif statement to define if Hobbit is picked to “ “

Define createCharacterMenu module:

Made a fancy menu for the user to create the name for his/her character

While True:

Another fancy menu for the user to pick a race

If and elif statements to assign the correct characterData to the player’s file for whichever race is selected

Else statement in case a selection not given is selected

Assign the characterData and race modifiers to the correct places for the correct race

Assign the max HP

And run the saveCharacter module

Define startMenu:

While True:

Yet another fancy menu to pick whether you want to make a new character, load a character, or quit

Create if statement for the create new character that runs createCharacterMenu() and battle() once finished

Elif statement for the user to enter the name of his/her character’s name so the program can find it and import the values, attributes, and modifiers, then run battle()

Else statement if the character you entered doesn’t exist

Elif statement to quit the program if 3 is entered

Define battle module:

Make sure isDead is false so your character alive

Load up the HP and potions for your character

While loop to run if you’re still alive:

For loop to make you fight through 4 orcs

Added fancy menus to display “you encountered an orc” and your current HP and potions, and the orc’s HP

Input for the user to pick to attack, use potion, or save and quit

If statement for the random chance to hit the orc

Else for if you miss, which you will…

Elif for if you want to drink a potion, or 2, or 3

Make sure you can’t go over the max HP provided, so you can’t get 40 HP when the max is 20.

Elif for if the user wants to save and quit

Else statement in case the user enters an invalid option

Create orc’s hit chance

If statement for if the orc hits you

Else statement if he misses

Final check to see if the user is alive or dead

FINAL BOSS

Fancy text to say you’ve encountered Uruk-hai

Set his health to 12

Display your HP, potions, and Uruk-hai’s HP

Input for the user to pick to attack, use potion, or save and quit

If statement for the random chance to hit Uruk-hai

Else for if you miss, which you will…

Elif for if you want to drink a potion, or 2, or 3

Make sure you can’t go over the max HP provided, so you can’t get 40 HP when the max is 20.

Elif for if the user wants to save and quit

Else statement in case the user enters an invalid option

Create Uruk-hai’s hit chance

If statement for if Uruk-hai hits you

Else statement if he misses

Final check to see if the user is alive or dead

If you’re dead, print you lost

If you’re alive, then congrats, you’ve won

Then rerun the startMenu()

Define main module:

Run startMenu()

Run main()