CSC1015F Assignment 1C

Introduction

Assignment Instructions

The questions in this assignment give you practice in typing in and editing programs.

Question 1 [20 marks]

Retype the following program into a file called `secret.py` and test that it runs. The program must be identical, down to the last bit of punctuation, including the spaces at the beginning of some lines!

Note: If you copy and paste code, you will most probably have problems submitting it to the Automarker. Furthermore, leave the author of the code as "Hussein Suleman" as that will be a way of referencing/acknowledging the author. Remember that if we do not acknowledge the author, that constitutes plagiarism.

You may need to create directories as per the instructions in the orientation manual.

```python
# program to guess a secret number
# Huleman Suleman
# 10 february 2011

secret_number = 42    # create secret number in program
guess = 0             # variable to store user's guess

# as long as we have not found the secret number
while guess != secret_number:
    # get a new guess from user
    guess = eval(input("? "))
    # check if guess is too low
    if guess < secret_number:
        print ("lo")
    # or too high
    elif guess > secret_number:
        print ("hi")

print ("Correct!")   # print message indicating success
```

This program is a classic from the early days of Computer Science. A user is expected to guess numbers until he or she converges to a secret internal number. At each incorrect guess, the system lets the user know if the number is too high or too low.

Sample Input/Output (*The input from the user is shown in bold***):**

```
? 22
lo
? 55
hi
? 42
Correct!
```

Question 2 [20 marks]

Edit the program from Question one so that the messages printed are more user-friendly. You need to copy the secret.py file from the first question to a file called `secret_2.py`.

Change each of the messages printed to the screen to be the same as the example output below.

User-friendliness of programs was a concept that gained popularity in the 1980s, where programs were made easier for human beings to identify with. This has since grown into the current field of Usability Engineering, which you will learn about while studying Computer Science.

Sample Input/Output (The input from the user is shown in bold font***):**

```
What is the secret number? 14
That is way too low. Please try again.
What is the secret number? 337
That is much too high. Please try again.
What is the secret number? 48
That is much too high. Please try again.
What is the secret number? 40
That is way too low. Please try again.
What is the secret number? 0
That is way too low. Please try again.
What is the secret number? 42
Congratulations, you have guessed the secret number!
```

Submission

Create and submit to the automatic marker a Zip file called `ABCXYZ123.zip` (where ABCXYZ123 is YOUR student number) containing `secret.py`, and `secret_2.py`.