

<b>Title</b>	Assignment 0
<b>Due</b>	24-Feb-2012 17:00
<b>Number of resubmissions allowed</b>	0
<b>Grade</b>	<b>100.0 (max 100.0)</b>

## Instructions

This assignment gives you more practice in typing in and editing programs. Do not worry if you do not now understand what is happening in the programs - after a few weeks you will be writing similar programs!

### Question 1 [50 marks]

Copy 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!

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

```
# program to guess a secret number
# hussein 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 IO

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

## Question 2 [ 50 marks]

Edit the program from Question 1 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 IO*

```
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 a Zip file containing **secret.py** and **secret\_2.py**.

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### Submission

This assignment does not accept online submissions. Contact your instructor for additional instructions.

Done