Quiz 2

Name: _____

Question 1. For each of the following expressions, show the resulting value and type, given the assignments for L, S, and x:

```
L = ["Econ","CS","Art","Bio","Hist","Ling"]
S = "bow ties are cool"
x = 42
```

	Value	**Type**
(a). `x>0 and x<100`	_____	_____
(b). `x<0 or x>100`	_____	_____
(c). `range(len(L))`	_____	_____
(d). `"bio" in L`	_____	_____
(e). `len(S)`	_____	_____
(f). `L[0] * 2`	_____	_____
(g). `L[2] + S[8:]`	_____	_____

Question 2. Write a program that asks the user for a phrase and then prints out half the phrase horizontally on one line, and the other half vertically. Here's an example of the running program (user input in **bold**):

```
phrase: we love comp sci!
we love
        c
        o
        m
        p

        s
        c
        i
        !
```

Question 3. Trace through the following program and show it's output (what would be printed on the screen).

```python
phrase = "ABCDE"
for i in range(len(phrase) - 1):
  output = phrase[:i] + phrase[i+1] + phrase[i] + phrase[i+2:]
  print("%2d: %s" % (i,output))
```

Question 4. Password Strength Checker: given the assignments below for `alph`, `nums`, and `pw`, write some python code to either print `OK` or `not OK`, depending on what the user enters for a password. If the entered password is at least 8 characters in length and contains at least one lowercase letter and one number (0-9), it is considered `OK`. For example, `c5rocks!` is `OK`, but `csrocks!` is `not OK` (no digit in the password).

```python
alph = "abcdefghijklmnopqrstuvwxyz"
nums = "0123456789"
pw = raw_input("new password: ")
```