CS330: Programming Language Project (PLP)
Assignment 6: Naming, scope, and bindings

You've already looked up the naming conventions for your variables, but what's the scope on your variables? Write code that tests the following questions, then write out your answers to the questions

1. Declare a variable (say, x) in the main body of your program. Then declare one inside of a for loop. Is there a conflict? Is the old variable overwritten, or do you now have two variables of the same name?
2. What if the other x is inside of a function?
3. Can you have variables that are globally accessible? What are the rules for creating them?
4. Are some variables passed by value while others are passed by reference? Which ones are which?
5. If you run this code (or the equivalent) in your language, what is the output? What does that tell you about how the language handles assignments?

```
char [] a = {'c','a','t'}
char [] b = {'d','o','g'}
a=b
b[1] = 'u'
print a
print b
```

As always, write out the answers to these questions as though you were writing a guide for a new learner. Make your answers as clear as possible, and don't just answer the questions in one or two words. Explain the reasoning behind the answers as much as possible. If there is no clear-cut answer to a question, explain why not. And cite your sources!

Turn in both your code and your written answers, and be prepared to run your code for me in lab.