

CSE 305 Programming Languages Spring, 2005

Homework 3

Maximum Points: 9

Due 9:00 am, Monday, February 14, 2005

Professor Shapiro

February 7, 2005

Write the answers to this homework set into a file named hw3, and submit it using the submit script, by the date and time shown above.

1. (3) The course notes, <http://www.cse.buffalo.edu/~shapiro/Courses/CSE305/2005/notes5.html> give informal descriptions of the syntax of identifiers in Java, Fortran, and Common Lisp. Give a similar informal description of the syntax of Python identifiers. Cite your source.
2. (3) C and C++ have the same set of keywords. What are they? Cite your source.
3. (3) Fill in the blanks in the following Perl program with variable identifiers:

```
#!/util/bin/perl
# Program to demonstrate the use of different variable identifiers.

_____ = "My Address Book";
_____ = ("kandefer", "shapiro");
_____ = ("shapiro" => "shapiro@cse.buffalo.edu",
         "kandefer" => "mwk3@cse.buffalo.edu");
print "_____: \n\n";
foreach _____ (_____) {
    print "The address of _____ is _____{_____}\n";
}
```

so that when you run it, it will produce the following output:

```
My Address Book:
```

```
The address of kandefer is mwk3@cse.buffalo.edu
The address of shapiro is shapiro@cse.buffalo.edu
```

Note:

- (a) The first line after the comments creates a string, and stores it in a variable.
- (b) The next line creates an array, and stores it in a variable.
- (c) The next line creates a hash, and stores it in a variable.
- (d) The foreach executes its block of statements, with a variable taking on successive elements of an array.
- (e) A value stored in a hash is accessed by `<hash>{<key>}`.
- (f) Add your own family name, in alphabetical order, to the array, and your own name and email address to the hash.
- (g) Include your completed program, and a trace of its run in the homework file you submit.