

Handshakes

Oct 2, 2007

Sprenkle - CS111

Determinism vs. Non-Determinism

- If no input and no randomness
 - Program always executes the same way with the same output
 - Known as **deterministic**
- Our programs have been deterministic
- Adding the random functions will make our program non-deterministic
 - Executing program multiple times will result in different execution, output

Lab 2 Feedback

- Better code readability!
 - Better variable names
 - Descriptive, useful comments
 - Use blank lines with comments to separate code “blocks”

Pretty Code

```
...
#Make first calculations to ft/s
jenny_ft_s = COURT_LENGTH / jennyspeed
laura_ft_s = COURT_LENGTH / lauraspeed
venus_ft_s = COURT_LENGTH / venusspeed

#Make second calculations to mi/hr
jenny_mi_hr = (jenny_ft_s * SECOND_TO_HOUR) * FEET_TO_MILE
laura_mi_hr = (laura_ft_s * SECOND_TO_HOUR) * FEET_TO_MILE
venus_mi_hr = (venus_ft_s * SECOND_TO_HOUR) * FEET_TO_MILE

#Display output nicely
print "    CISC111 Tennis Pros"
print "-----"
print "\t\t ft/s\t  mi/hr"
print "Laura\t\t%5.2ft %6.2f" % (laura_ft_s, laura_mi_hr)
print "Jennifer \t\t%5.2ft %6.2f" % (jenny_ft_s, jenny_mi_hr)
print "Venus\t\t%5.2ft %6.2f" % (venus_ft_s, venus_mi_hr)
```

Descriptive variable names

Use of constants

Comments, Space
between blocks of code

Lab 2 Feedback

- Template string with format specifiers
 - Can include other characters besides format specifier
 - Can have more than one replacement value
 - Examples:
 - `print "Venus %20.2f %10.2f" % (fpers, mph)`
 - `print "%3d|" % (x*y)`

Needs to be in parentheses



Lab 2 Feedback

- Remember to remove ~ files before printing
 - Saves paper because extra file isn't getting printed out