CS150 – File I/O

Note Title 3/5/2012

Announcements

- HW due Thursday
- Next HW up Wednesday, due Wed. after break

Ch. 8 : Input + Output

So far, we've seen standard I/O.

raw_input() function:

- Takes input up to first 'enter' from keyboard (not including newline)
- Returns a string
- Optional input — string for prompting

Print statement

- Accepts 0 or more inputs, separated by commas.
- Not really a function — no ( ) around inputs
- Automatically casts every input to str( ).
- Each comma is a space, & end is a newline

Can avoid the newline: print 'I like', print 'cookies'

→ I like cookies

Formatted strings

Want to print

'Cardinals: ranked 1 of 30'

(Cardinals: team, 1: rank, 30: total)

where we have variables.

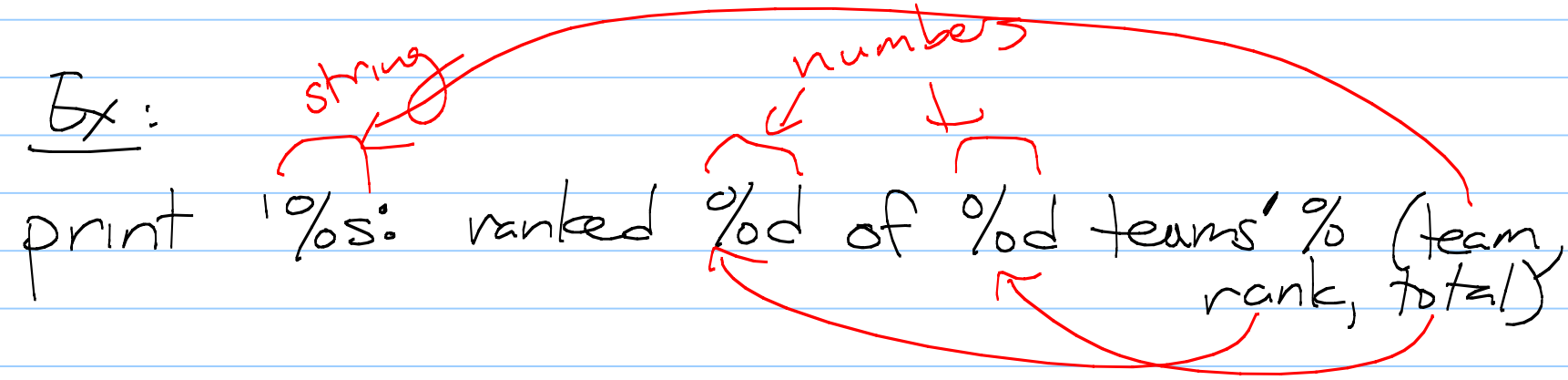
How?

```
team = 'Cardinals'
rank = 1
total = 30
```

```
print team + ': ranked ' + str(rank) + ' of ' + str(total)
print team + ': ranked', rank, 'of', total
```

Easier way: %s , %d → place holders for later variables

Ex:



Fills in variables from end tuple to open spots, assuming they match the correct type.

More formatting

Can even use this to specify precision:

```
print 'You owe $%.2f, cash.' % 350
```

```
print '%4d' % 12
print '%04d' % 12
print '%-4d' % 12
```

More examples

```
' %7.3f\n+ %7.3f' %(80.0/3.0, 3.0/4.0)
```

Note:
Not dependent on print, also:

```
message='%s: ranked %d of %d teams' %
                    (team, rank, total)
```

Practice

Set variables named person, day, & month to be your information.
Use string formatting to produce the form:

Erin's birthday is March 27.

Erin = person
March = month
27 = day (an int)

Pt 2: Redo the previous to work on 3 lists storing names, days, & months, & produce output for each triple.