CS150 - File I/O

Announcements

- HW due Thursday

- Next HW 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, a end is a newline
  Can avoid the newline: print 'I like',
  print 'cookies'
  I like cookies
Formatted strings

Want to print \( \text{Cardinals}: \text{ranked } \frac{1}{\text{rank}} \text{ of } \frac{1}{\text{total}} \) where we have variables.

How?

\[
\begin{align*}
\text{team} &= \text{\textquotesingle}\text{Cardinals}\text{\textquotesingle} \\
\text{rank} &= 1 \\
\text{total} &= 30
\end{align*}
\]

Print \text{team} + \text{\textquotesingle} ranked \text{\textquotesingle} + \frac{\text{rank}}{\text{total}} \text{ of } + \frac{1}{\text{total}}

Print \text{team} + \text{\textquotesingle} ranked\text{, rank, of, total}\text{\textquotesingle}
Easier way: %s, %d - place holders for later variables

Ex:

print '1%: ranked %d of %d teams' % (team, rank, total)

Fills in variables from end tuple to given 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

\[ \%7.3f \text{ } + \text{ } \%7.3F \text{ } \% \text{ } (80.0/3.0, 3.6/4.0) \]

Note: Not dependent on print, also:

```python
message = \text{\%} s \text{ } = \text{ranked } \% \text{ of } \% \text{ of teams' } \% \text{ (team, rank, total)}
```
Practice

Set variables named `person`, `day`, `month` to be your information.

Use string formatting to produce the format:

Erie's birthday is March 27.

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