File Reading

Basic file-reading loop

```
file = open("filename.txt", "r") # Open the file.  Replace filename.txt with
                                 # a real file name.

for line in file:                # "Magic" for loop. Reads one line of the file
                                 # at a time into the string variable called line.

  line = line.rstrip()           # Needed to remove the extra "newline"
                                 # character at the end of the line.

  print("Just read:", line)      # Use this print statement for debugging
                                 # and remove it after your loop works.

  [process the line, including   # Do whatever your loop needs to do here.
   any data type conversions]

file.close()                     # Close the file when we're done with it.
```

Hints and things to remember

- All information is always read from a file as a string.
- If the piece of information you want from the file is a number (an int or a float), use the int or float conversion function to convert it:

```
file = open("filename.txt", "r")
for line in file:
  line = line.rstrip()
  num = int(line)                # convert line into an int, put result in num
  print("This is a number:", num)
```

- When writing a file-reading loop, always remember to rstrip() the line as you read it, or else you may have extra blank lines in your output.