

CS 106
Introduction to Computer Science I

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Today's Topics

- Questions / comments?
- Finish blackjack program to add a dealer's hand and compare that to the player's hand
- File input and output
- Splitting strings into lists of strings by delimiters

Files

- Python's file input and output
 - open function
 - Returns a `<class '_io.TextIOWrapper'>`
 - Parameters: file name and an optional mode (defaults to 'r' for read)
 - Modes: 'r', 'w', 'a', 'r+', 'w+', 'a+'
 - 'r' is for opening files for reading
 - 'w' is for opening file for writing
 - 'a' is for opening file for appending
 - The + ones allow reading and writing

Files

- Methods you can call on the returned variable from open:
 - read (reads the entire file into a string that is returned)
 - readline (reads up to a newline and returns a string)
 - write (writes the parameter to the file)
 - seek (move the file pointer to a certain byte)
 - close (closes the file after reading/writing)

Let's write some code that reads and writes files

- Also I'll show
for ____ in ____:
usage with files

split and re.split

- split method in str
 - mystr = “Hello, World!\nWhat a nice day.”
 - e.g.
 - listofstrs =mystr.split() # splits on whitespace
 - # and discards empty strings
 - list2 = mystr.split(“,”) # splites on comma
 - Return a list of strings
- import re
- re.split function
 - Takes in a pattern (regular expression) and a string to be split

More about dictionaries

- [] vs. get
- Looping through a dictionary e.g.:

for word in worddict:

```
    print(word, worddict[word])
```

Larger example from textbook

- Let's look at section 10.4