

**CS-121:**

**Unit 2: Intro. File I/O and  
Dictionaries**



# Upcoming

- Today: Continued work on File I/O and Dictionaries + OmnicoProjects
- Tomorrow: Mid-term grades sent out
- Next week: OmniCo Project 2 Due



# Final Project Preparation

- Start thinking about what you want to try
- Project Specification Meeting (Office Hours)
- Weekly check-ins

# Office Hours

- **Today:** 4:30–5:30 PM (200-D)
- **Tomorrow:** 2:30–3:30 PM (During Lab)
- **Thursday:** 4:30–5:30 PM (200-D)

```
# Open the text file and read each line
with open('items.txt', 'r') as file:
    items_list = []
    for line in file:
        # Strip whitespace and add to items_list
        item = line.strip()
        items_list.append(item)
```

```
# Open the CSV file and read data into a list of dictionaries
with open('data.csv', 'r') as file:
    header = file.readline().strip().split(',')
    data_list = []
    for line in file:
        record = {} # Create a new dictionary for each record
        # Strip whitespace and split by comma
        fields = line.strip().split(',')
        # Convert numeric fields as needed
        record['user_id'] = int(fields[0])
        # ... convert other fields as needed
        data_list.append(record)
```

```
# Initialize dictionaries for counting and summing values
item_counts = {}
for item in items_list:
    item_counts[item] = 0
```

```
# Count keywords in a list
keywords = ['apple', 'banana', 'apple', 'orange']
posts = [
    "I like apples and bananas",
    "I like apples and oranges",
    "I like bananas and oranges"
]
keyword_counts = {}
for keyword in keywords:
    keyword_counts[keyword] = 0
for post in posts:
    for keyword in keywords:
        if keyword.lower() in post.lower():
            keyword_counts[keyword] += 1
print(keyword_counts)
```





# Project Work Day

- Work on OmniCo Projects
- Work on final project outline
- Ask for help if needed

# OmniCo Project 2

- Remember to ask for tips if you need help
- Due on Thursday before class



OMNICO

Welcome to the future.

Welcome home.

Welcome to OmniCo.

# Thank You!

- Don't forget to **start on Project 2**
- See you during **office hours!**