

# CSC108 FSG

Wed. 2-3pm MN2266

# Intro & Ice Breaker

Introduce yourself to others...

- ☐ Name
- ☐ One fun fact about yourself
- ☐ How was your reading week

# CSV( \_\_\_\_\_ -Separated Values)

Which of the below is an example of CSV.

---

a) CSC108, MAT102, ANT101

MAT135, AST100, CSC148

---

b) CSC108   MAT102   ANT101

MAT135   AST100   CSC148

---

What built-in function do we use to handle CSV files?

# CSV(Comma-Separated Values)

Some CSV Files can have columns at the top of the file. How do we skip this first line?

Given a list How would we get a line, so we can right back to the CSV file.

```
>>> lst = [ "CSC108", "MAT102", "AST101" ]
```

```
>>>
```

```
>>> "CSC108,MAT102,AST101"
```

# CSV(Comma-Separated Values)

You are given a CSV file in the following format:

---

```
1 Integer,Literal
2 5,Five
3 8,Eight
4 3,Three
5 10,Ten
```

---

Write a function that reads from the CSV file, and filter out rows where the integer in the first column is odd, and write the even rows to “even\_numbers.txt”

```
def filter_even_numbers(file_name: str) -> None:
```

# Dictionary

- 1) What are the difference between the list and dictionary?
- 2) How do you access values in dictionary? For example, how do I retrieve the value of “one” here?

```
>>> dict = {"one":1, "two":2, "three":3}
```

```
>>> print()
```

```
>>> 1
```

- 3) What built-in functions do we use for dictionary?

# Dictionary



"""

Return the dictionary where each key is a key that  
4 is in both <d1> and <d2>.

The value associated with each key in the new dictionary  
7 is the sum of all the integers associated with that key  
8 in <d1> and <d2>.

```
>>> combine({1: [2], 4: [5, 6]}, {4: [8]})
```

```
{4: 19}
```

"""

```
def combine(d1: dict[int, list[int]], d2: dict[int, list[int]] ) -> dict[int, int]:
```

```
...
```

# Tuple

What is tuple? What are the differences between data structures like list and dictionaries?

```
>>> t = (1, 2)
```

```
>>> l = [1, 2]
```

```
>>> d = [{"index 0":1, "index 1": 2}]
```

```
>>> l[0] = 2
```

```
>>> t[0] = 2 # will this work?
```

```
>>> d[0] = 2 # what about this? and Why?
```



# Nested Dictionaries