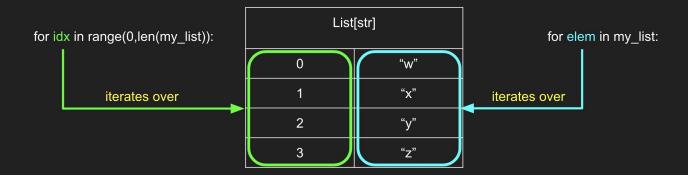
## For Loops

Added some figs to explain for loops better on Campuswire.

(If you haven't joined, please do! Info on course website under "support".)



# COMP 110

# CL07 - Dictionary + Scope Practice

#### **Quiz 02!**

- Working on creating a bank of extra (optional) practice questions to accompany the typical ones.
- Also will be extra (optional) coding practice questions. There will be a separate Gradescope you can join to check your answers with an autograder!
- I will make a more detailed announcement about this via Sakai in the next few days!

### On the Horizon

CQ04

EX06

RD01

(Deadlines extended for break!)

```
def f(x: float) -> float:
       x += 1.0
 3
       y: float = x + 2.0
       return x + y
 5
   def g() -> None:
 6
       global y
8
      x: float = f(3.0)
 9
     y = f(x + 4.0)
10
11 x: float = 0.0
12 y: float = 0.0
13 g()
14 print(f"{x}, {y}")
```

```
1 square_to_root: dict[int, int] = {}
 i: int = 1
  while i < 5:
5
     square_to_root[i ** 2] = i
6
    i += 1
7
  print(square_to_root)
```

6

8

i += 1

print(square\_to\_root)

```
def main() -> None:
        names0: dict[str,str] = {"Pres.": "Lily", "VP.": "Ruby"}
 2
 3
        names1: dict[str,str] = {"VP.": "Carlos", "Sec.": "Lin"}
 4
        officers: dict[str,str] = merge(names0, names1)
 5
        print(officers)
 6
   def merge(a: dict[str,str], b: dict[str,str]) -> dict[str,str]:
 8
        result: dict[str,str] = {}
        for key in a:
 9
            result[key] = a[key]
10
        for key in b:
11
12
            result[key] = b[key]
13
        return result
14
   if __name__ == "__main__":
15
16
        main()
```

```
names0: dict[str,str] = {"Pres.": "Lily", "VP.": "Ruby"}
        names1: dict[str,str] = {"VP.": "Carlos", "Sec.": "Lin"}
        officers: dict[str,str] = merge(names0, names1)
 5
        print(officers)
 6
   def merge(a: dict[str,str], b: dict[str,str]) -> dict[str,str]:
        result: dict[str,str] = {}
 8
        for key in a:
10
            result[key] = a[key]
        for key in b:
11
            result[key] = b[key]
12
        return result
13
14
   if <u>__name__</u> == "__main__":
15
16
        main()
```

1 def main() -> None:

# Challenge Question (CQ04)

- Function name: zip
- Takes list[str] and list[int] as arguments
- Returns dict[str,int].
- The function should produce a dictionary where the keys are the items of the first list and the values are the corresponding items at the same index of the second list.
- If the input lists are different lengths or if they are empty, the function should return an empty dictionary.
- (More info on website!)