

Welcome! 

Announcements:

- Results for g06-g08 are on Blackboard
- Exercise g09 and g10 are posted and due on Friday
- Exercise g11 will be posted on Thursday and due Friday
- Information session with the Arizona Governor's Office

Thursday, February 6th, during class

Representatives from the Arizona Governor's Office will visit class to talk about working at the office.

Tips:

- Test functions **one at a time as you write them**
 - Especially in g09, which has 5 functions
 - E.g., check `read_households()` **before** writing `ind_demand()`, etc.
- Rounding to integers:
 - `round(3.14, 0)` returns a float: 3.0
 - `round(3.14)` returns an int: 3
- More on Python tuples:

Key use: **dictionary keys** (keys must be immutable):

```
salary = {  
    ("Smith", "Clara"): 72015,  
    ("Jones", "Beth"): 80145,  
    ("Jones", "Allan"): 65234  
}
```

When sorted, lists of tuples are **automatically sorted hierarchically**:

- Initially sorted by **1st value**
- Then records with identical 1st value sorted on **2nd value**,
- And so on ...

```
keys = salary.keys()
```

```
keys ➡ [  
    ("Smith", "Clara"),  
    ("Jones", "Beth"),  
    ("Jones", "Allan")  
]
```

```
by_name = sorted( keys )
```

```
by_name ➡ [  
    ("Jones", "Allan"),  
    ("Jones", "Beth"),  
    ("Smith", "Clara")  
]
```

More features of tuples in the future