

PFTD: Review, Lab, Transform

- **Can a loop be in the body of another loop?**
 - Are there constraints in what code goes where?
 - See, e.g., SandwichBar APT and Poker-dealing later today
 - Sometimes putting loop in another function helps
 - Conceptually simpler than nested loops
- **Reading and writing from and to files**
 - What are functions for doing this?
 - How do we use them?

Getting started with code/assignments

- **Understand what the code/assignment is about**
 - What's going on with Transform? What happens?
 - Can we run it to test it? What are the first, second steps?
- **Understand parts of the code given to you**
 - You don't need to understand everything, why?
 - You could try to understand everything, why?
- **Using piglatin, rot13, writing to files, transforming**
 - Lots of parts, where to start?
 - Tell you or let you figure this out...

Statistical Analysis of Poker Hand

- **How do we represent cards? Deck? Suit? Rank?**
 - What is a card?
 - What can you do with a card?
 - How will we represent a hand?
 - Keep things simple: lists help!
- **How do we 'create' a deck**
 - Number of cards?
 - Code for creating cards?
 - Loop over suits/ranks
 - Debugging assistance!



Coping with cards: Cardtester.py

- **Dealing a deck of cards in Python: Cardtester.py**
 - In code below, what is a deck?
 - What is a card?
 - What's easier to understand: [0,1] or "ace of hearts"
 - How do nested loops work?
 - Why do we use strings? Lists? Tuples?

```
def getDeck():  
    d = []  
    for rank in range(0,13):  
        for suit in range(0,4):  
            d.append([rank,suit])  
    return d
```

