

Compsci 101

Dictionaries, Jotto

Part 1 of 2

```
d = {}
```

```
d.keys()
```

```
d.values()
```

```
d[key]
```

```
d.get(key, dv)
```

```
d.items()
```

Susan Rodger

March 23, 2021

P is for ...



- **Python**
 - Whatever you want it to be? Language!!!
- **Parameter**
 - When an argument becomes a variable
- **Power Cycle**
 - Not the last resort. But works
- **P2P**
 - From networking to collaboration

Dictionary Metaphors

- Look up Duke Blue and get #001A57 or (0,26,87)
 - Key is name of color, value is hex or (r,g,b)
- Look up your address, your physical home
 - Key is address, value is the actual home
- Look up www.cs.duke.edu and get 152.3.140.1
 - Key is URL, value is IP address, browsers

Dictionary Syntax and Semantics

Syntax/Function	Meaning
<code>d = {}</code>	Initialize empty dictionary d
<code>d.keys()</code>	Collection of keys in dictionary
<code>d.values()</code>	Collection of values
<code>d[key]</code>	Value associated with key (error if key not in d)
<code>d.get(key, dv)</code>	Value associated with key (dv if key not in d, dv is optional)
<code>d.items()</code>	Collection of (key,value) tuples in d

danah boyd

Dr. danah boyd is a Principal Researcher at [Microsoft Research](#), ... and a Visiting Professor at New York University. Her research is focused on addressing social and cultural inequities by understanding the relationship between technology and society.



“If I have learned one thing from my research, it’s this: social media services like Facebook and Twitter are providing teens with new opportunities to participate in public life, and this, more than anything else, is what concerns many anxious adults.”

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Dictionary Iteration (unordered!)

- Iterate through keys:
 - `for k in d:`
 - `for k in d.keys():`
- Iterate through pairs:
 - `for (k,v) in d.items():`
 - `for k,v in d.items():`

Sorting a list – sorted()

- Create a new list in alphabetic order

```
lst = ['plum', 'apple', 'kiwi']
```

```
x = sorted(lst)
```

- Using sets with sorted