

# Python – if statements, tuples, and sets

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STAT 2984

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## Review:

- lists

```
colors = ['red', 'blue', 'purple']
```

```
colors[1] #blue
```

```
colors.append(["green"]) # colors + ["green"]
```

- dictionaries

```
dictionary = {"Statistics": ["STAT 2984"]}
```

```
dictionary["Statistics"][0] # 'STAT2984'
```

- for loops

```
count = 0
```

```
for x in colors:
```

```
    → print x  
    count += 1
```

## if statements

if [comparison]: → code to perform if true	if cond 1: syntax
else: → code to perform if false	elif cond 2: syntax
	else: syntax

if today's-temp  $\geq$  70:

if class-name == "STAT2984": # != not equ.

if not class-name == "STAT2984":

if "red" in colors:

tuples

department  
↓

course  
num.  
↓

c1 = ("Statistics", 2984)

c2 = ("Statistics", 3005)

# department

if c1[0] == c2[0]:

print "Same dept."

---

tuple-dict = dictionary.items() # [ ("Statistics", 2984), ("Statistics", 3005) ]

sets

```
set_states1 = set(["IL", "VA", "VA", "OH", "OH"])
```

```
print set_states1 # set(['IL', 'VA', 'OH'])
```

```
set_states2 = set(["VA", "MA", "NY", "NY", "CA"])
```

```
set_states1.union(set_states2)
```

```
set_states1.intersection(set_states2) # VA
```

```
set_states1.difference(set_states2)
```

## Reminder: Assignment 2

- Posted and due February 6, 2018.
- If you have questions or need help, post an issue!