



DATA 8
Fall 2016

Lecture 12, September 21

Conditional Statements and Iteration

Slides created by Ani Adhikari and John DeNero

Announcement

- **Project 1** will be released today in lab!

Random Selection

`np.random.choice`

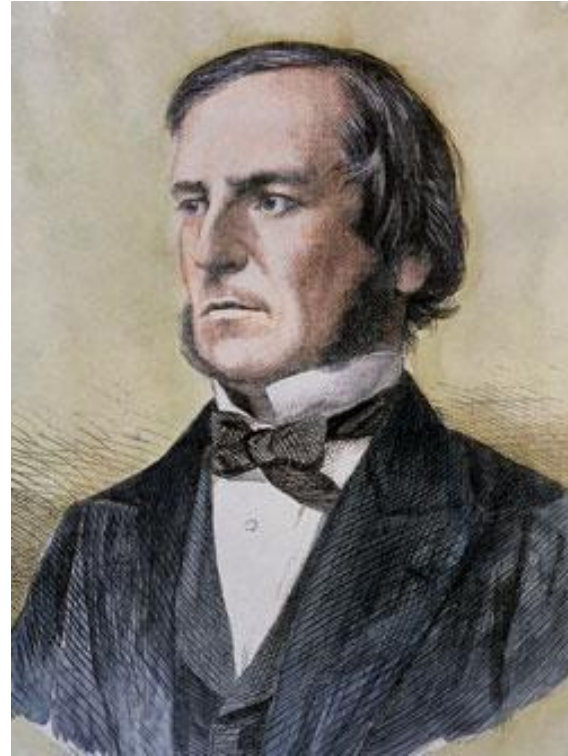
- Selects at random
- with replacement
- from an array
- a specified number of times

`np.random.choice(array_name, sample_size)`

(Demo)

George Boole

The Laws of Thought
(1854)



Boolean

- Type
- “yes/no”, “on/off”
- **True, False**
- 1, 0

Often the result of a “comparison”.

(Demo)

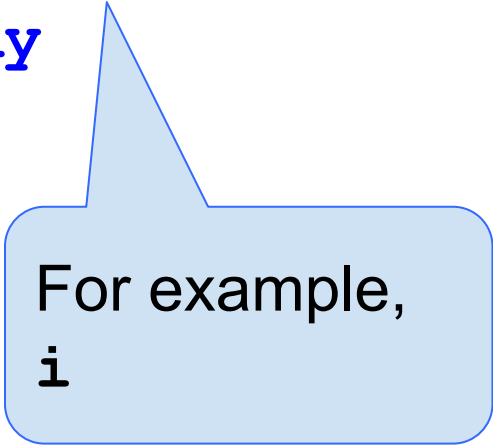
Conditional Statement

```
if <if expression>:  
    <if body>  
elif <elif expression 0>:  
    <elif body 0>  
elif <elif expression 1>:  
    <elif body 1>  
...  
else:  
    <else body>
```

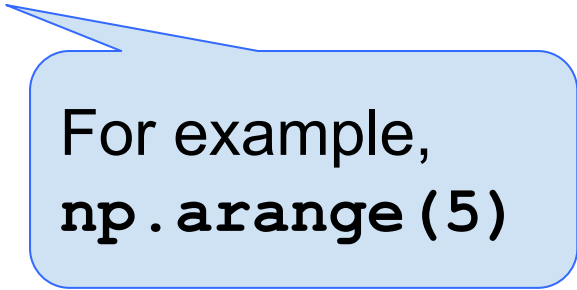
(Demo)

for Statement (“loop”)

```
for item_name in sequence:  
    body
```



For example,
`i`



For example,
`np.arange(5)`

(Demo)

Caution ...

