python-week2-homework

February 3, 2018

Table of Contents

```
In [2]: %%javascript
        $.getScript('https://kmahelona.github.io/ipython_notebook_goodies/ipython_notebook_toc
```

```
<IPython.core.display.Javascript object>
```

0.1 Reading Assignments

https://docs.python.org/3/tutorial/introduction.html
https://docs.python.org/3/reference/lexical_analysis.html

0.1.1 World View From a Computer Perspective

- We understand the world by 5 senses: see, hear, touch, taste, smell

- we describe/represent the world by words/text, numbers, images, audio, videos.

- Guess how does computer understand and represent the world?

0.1.2 Numbers Representation

Computer use switches/gates to represent 0 and 1
http://computing-concepts.cs.uri.edu/index.php/Data_Representation_For_Computing

```
In [3]: print("{:>8} {:>8} {:>8} {:>8}".format('dec', 'bin', 'oct', 'hex'))
        print("-"*40)
        for i in range(20):
            print("{:>8} {:>8} {:>8} {:>8}".format(i, bin(i), oct(i), hex(i)))
```

```
     dec      bin      oct      hex
----------------------------------------
       0      0b0      0o0      0x0
       1      0b1      0o1      0x1
       2     0b10      0o2      0x2
       3     0b11      0o3      0x3
       4    0b100      0o4      0x4
       5    0b101      0o5      0x5
```