Untitled5

January 6, 2020

```
[346]: # 2nd
```

```
[413]: import re
```

```
[414]: inp = "July 02, 2008 00:00"
```

```
[415]: (month, date, year, hour, minute) = re.findall("(\w*) (\d{2}), (\d{4}) (\d{2}):
       ↪(\d{2})", inp)[0]
```

```
[416]: dictionary = ["January", "February", "March", "April", "May", "June", "July",
       ↪"August", "September", "October", "November", "December"]
```

```
[417]: month = dictionary.index(month)
       year = int(year)
       date = int(date)
       hour = int(hour)
       minute = int(minute)
```

```
[418]: def isLeap(year):
           return year%400 == 0 or (year % 4 == 0 and year % 100 != 0)
```

```
[419]: daydict = [31, 28, 31, 30, 31, 30, 31, 31, 30, 31, 30, 31]
```

```
[420]: days = 0
       for i in range(month):
           days += daydict[i]
           print(daydict[i], i)
           if isLeap(year) and i==1:
               days+=1
```

```
31 0
28 1
31 2
30 3
31 4
30 5
```

```
[421]: seconds = (days + date-1) * 24 * 60 * 60
       seconds
```

[421]: 15811200

```
[422]: hours = 0
       for i in range(hour):
           hours+=1
```

```
[423]: seconds += hours * 60 * 60
```

```
[424]: minutes = 0
       for i in range(minute):
           minutes += 1
```

```
[425]: seconds += minutes * 60
```

```
[426]: seconds
```

[426]: 15811200

```
[427]: totalSeconds = 0
       if isLeap(year):
           totalSeconds = 366 * 24 * 60 * 60
       else:
           totalSeconds = 365 * 24 * 60 * 60
```

```
[428]: "%.9f"%(seconds / totalSeconds * 100)
```

[428]: '50.000000000'

```
[ ]:
```

```
[ ]:
```