Breakout Session exploring some modules

remember: help()

- A. create and edit a new file called age.py
- B. within age.py, import the datetime module
 - use datetime.datetime() to create a variable representing when you were born
 - use datetime.datetime.now() to create a variable representing now
 - subtract the two, forming a new variable, which will be a datetime.timedelta() object. Print that variable.
 - I. how many days have you been alive? How many hours?
 - 2. What will be the date in 1000 days from now?
- C. create and edit a new file called age I.py

when run from the command line with I argument, age I.py should print out the date in days from now. If run with three arguments print the time in days since then

```
BootCamp> ./age1.py 1000
date in 1000 days 2014-10-09 07:40:49.682973
BootCamp> ./age1.py 1980 1 8
days since then... 11699
```

A. create and edit a new file called age.py

B. within age.py, import the datetime module

- use datetime.datetime() to create a variable representing when you were born
- use datetime.datetime.now() to create a variable representing now
- subtract the two, forming a new variable, which will be a datetime.timedelta() object. Print that variable.

I. how many days have you been alive? How many hours?

2. What will be the date in 1000 days from now?

age.py

```
import datetime
born = datetime.datetime(1985, 9, 11, 0, 0, 0)
now = datetime.datetime.now()  # note... .utcnow() gives the universal time, .now()
                                   # gives the local time. We're ignoring timezone stuff here.
diff = now - born # cool! I can subtract two dates
print diff
# 1. how many days have you been alive? How many hours?
print "days alive:", diff.days
print "hours alive:", diff.days*24.0
# 2. What will be the date in 1000 days from now?
# let's create a timedelta object
td = datetime.timedelta(days=1000)
print "in 1000 days it will be", now + td # this is a datetime object
```

C. create and edit a new file called age I.py

when run from the command line with I argument, age I.py should print out the date in days from now. If run with three arguments print the time in days since then

age I.py

```
import datetime
import sys
def days since now(year, month, day):
    now = datetime.datetime.now()
    print "days since then...", (now - datetime.datetime(year, month, day, 12, 0, 0)).days
    return
def date from now(ndays):
   now = datetime.datetime.now()
    print "date in " + str(ndays) + " days", now + datetime.timedelta(days=ndays)
if name == " main ":
    if len(sys.argv) == 2:
        date from now(int(sys.argv[1]))
    elif len(sys.argv) == 4:
        days since now(int(sys.argv[1]),int(sys.argv[2]),int(sys.argv[3]))
    else:
        print "dont know what to do with", repr(sys.argv[1:])
```