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.

1. 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 **age1.py**

when run from the command line with 1 argument, age1.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
```

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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
```

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age1.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[2]))
    else:
        print "dont know what to do with", repr(sys.argv[1:])
```