

Practice Problems II (methods)

Copy this into a Python file and add the specified code under each comment. For testing purposes, you can comment out working parts as you go (surround the lines with `"""`).

```
"""
This is how you comment
out a whole block of stuff.
"""

# define a class that holds a calendar date. public data members:
# - year, month, day (day-of-month)
# give it a parameterized constructor that takes initial values for year, month and day

# create two date objects using your class: 11/18/2016 and 11/21/2016

# add a method to your class called __str__ that converts the date object into a string
# of the format month/day/year

# print the two date objects to see that your __str__ method works

# add a method to your class called before that takes another date object and returns
# True if this date is before that other date

# use the before method in a condition to print the earlier of the two date objects

# do tests with additional date objects to verify that your before methods works for dates
# in the same or different years and months

# the built-in time module has a time() function that returns the system time (a float)
# in seconds since the epoch (January 1, 1970)

# define a stopwatch class with data members start_time and end_time
# give it a default constructor and set start_time and end_time to 0

# add a method to your class called start that takes no parameters and sets the data
# member start_time to the current time using time.time()

# add a method to your class called end that takes no parameters and sets the data
# member end_time to the current time using time.time()

# add a method to your class called time_elapsed that returns the difference between
# end_time and start_time

# use your stopwatch class to display the number of second that it takes Python to run
# this loop:

x = 0
for i in range(0, 1000):
    x = x + i
```