

## How To Properly Comment Your Code

**Uncommented Code** The 6.189 staff received this code to grade.

```
city=raw_input("Enter a city: ")
while city[-1]==" ":
    city = city[:-1]
temp=raw_input("Enter a temperature in Farenheit: ")
temp = float(temp)
temp = (temp - 32.0)*(100.0/180.0)
temp = round(temp,3)
temp = str(temp)
print "In "+city+" it is "+temp+" degrees Celcius!"
```

There's a bunch of problems with it. A quick scan of it reveals no info as to which of our 250 students wrote this code. What is the name of the file? What does it do? At a glance, we are lost. This code would receive a grade of a ✓.

**Commented Code** The staff next received this file.

---

```
#Alyssa P. Hacker
#fah_to_celsius.py

#collect a city name from user
city=raw_input("Enter a city: ")

#truncate whitespace
while city[-1]==" ":
    city = city[:-1]

#collect a temp from user
temp=raw_input("Enter a temperature in Farenheit: ")

#convert string to float
temp = float(temp)

#convert Farenheit temp to Celsius temp
temp = (temp - 32.0)*(100.0/180.0)

#truncate to 3 decimal places
temp = round(temp,3)

#recast as string so we can concatenate
temp = str(temp)

#print result!
print "In "+city+" it is "+temp+" degrees Celcius!"
```

We can clearly see Alyssa's name and the name of her file. Further she has well-commented what the lines of her program do. This code would receive a grade of +. You should be like Alyssa! You should comment wherever you can - put comments that explain what you're doing, and if you're doing something tricky or unique be sure to explain that, as well. A good goal is to have 1 comment for every 1-4 lines of code. Be sure to not only document what your code is doing, but, as you begin writing more advanced code, you should document what was intentionally left out, optimized away, tried and discarded, etc - basically, any design decision you make.

MIT OpenCourseWare  
<http://ocw.mit.edu>

6.189 A Gentle Introduction to Programming  
January IAP 2011

For information about citing these materials or our Terms of Use, visit: <http://ocw.mit.edu/terms>.