W12:Homework:H01

From 56wiki

CS56—Advanced Applications Programming—W12

First name (color-in initial)	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	section (2,3,or 9)	first name initial	last name initial
Last name (color-in initial)	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z			

H01: Due Thu/Fri 01.12-01.13 in Lab. Total Points: 50

MAY ONLY BE TURNED IN DURING YOUR ASSIGNED LAB SECTIONS ON THURSDAY 01.12.12 or FRIDAY 01.13.12, or offered in person, for in person grading, during instructor or TAs office hours.

See the course syllabus at https://foo.cs.ucsb.edu/56wiki/index.php/W12:Syllabus for more details.

Reading Assignment:

Throughout the quarter, when I refer to **HFJ**, this means your Head First Java, 2nd Edition textbook. The other textbook for the course is the Java Pocket Guide, which I'll refer to as **JPG**. Each of these has its own page on the wiki with reading notes.

You'll have reading assignments in JPG starting Thursday, so if you haven't picked up it up yet, please do so.

- Please Review Chapter 1 in HFJ.
- As you read, also consult the reading notes which you can find at this page on the wiki: HFJ:Chapter 1
- Then read Chapter 2 in HFJ.
- As you read, also consult the reading notes which you can find at this page on the wiki: HFJ:Chapter 1

This pattern will repeat througout the quarter—you'll have a reading assignment in the textbook, but there will ALSO be instructors notes on the Wiki about that chapter that are ALSO part of the reading assignment. Sometimes questions in the homework will come from those notes. So read them too.

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(1) (10 pts) Fill in the information below. Also, fill in the A-Z header by

- **coloring in** the first letter of your first and last name (as it would appears in Gauchospace),
- writing **either 2, 3 or 9** to indicate your **discussion section** meeting time
- writing your **first and last initial** in large capital letters.

All of this helps us to manage the avalanche of paper that results from the daily homework.

name:	
umail address:	@umail.ucsb.edu

See homework H00 for an explanation of why we are so picky about this. The short version: 21 homeworks times 75 students > 1500 pieces of paper. Organization is the key to not getting overwhelmed!

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(2) (10 pts) Based on your reading in HFJ Chapter 1: will the following code print foo forever? Or is it a syntax error? Explain. (Assume it appears inside a main function). Don't assume that Java will work the same was as C/C++ in this respect.

```
int x = 1;
while (x) {
  System.out.println("foo");
}
```

(Please turn over for more...)

(3) (10 pts) Based on your reading in HFJ Chapter 2, what is "Garbage Collection"?

(4) Based on your reading in HFJ Chapter 2, how would you complete these sentences:

- (6 pts) "The state of an object is represented in its _____"?

- (6 pts) "If you make something "public" and "static", that makes it behave sort of like _____"?

(5) (8 pts) Not too many things are worth memorizing, because in most cases you can just look them up. But one thing that is worth memorizing as a Java Programmer is the eight primitive types.

- You might get asked in a job interview, for one thing.
- Second, it helps to reinforce the distinction between primitive types and everything else (and in Java EVERYTHING else is an Object.)

So, list them for me. What are the eight primitive types? (1 point each)