

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 (4, 5 or 6)	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			

## H03: Due Monday, 01.12 in Lecture

### Integer/String conversion, Random Numbers, Getters/Setters (HFJ Ch 4,5)

Assigned: Wed 01.07

Total Points: 50

MAY ONLY BE TURNED IN IN THE LECTURE/LAB LISTED ABOVE AS THE DUE DATE, 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/W15:Syllabus> for more details.

(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 appears in Gauchospace),
- writing **either 4, 5, or 6** to indicate your **discussion section (lab)** 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:	
uemail address:	@uemail.ucsb.edu

If you collaborated with AT MOST one other person on this homework, write his/her name below. She/he should also have your name on his/her paper.

- Review HFJ Chapter 4 and reading notes at HFJ:Chapter\_4
- Read Chapter 5 in HFJ, p. **95** -124.Extra Strength Methods (and reading notes: HFJ:Chapter\_5

(2) (10 pts) Write a few lines of code that demonstrate how to take a integer value that is in a String, and convert it to an integer value in an int variable. You can find an example of this in Chapter 5.

(3) (10 pts) (From Chapter 5) Write a few lines of code that demonstrate how to choose a random number between 0 and n-1 (assume that n is an int variable that has been assigned some value greater than or equal to 1).

(4) (10 pts) Frequently asked "job interview" question that comes from somewhere in chapter 4 or 5: briefly explain: part of Object-Oriented Programming is "encapsulation". What is "encapsulation"?

(5) (10 pts) Based on your reading on p. 79 in Chapter 4: assume you have a class for a student with attributes name (of type String) and perm (of type int). Write setters and getters for name and perm as they would appear inside the student Class. The rest of the class has been written for you below---just fill in the missing parts.

(Note that for purposes of this homework assignment, we have left out "public" and "private" since they are not yet covered in the book on p. 79, but later in the course you'd be expected to include them as appropriate.)

```
class Student {  
    String name;  
    int perm;  
  
    // Now, you please fill in getters and setters for name and perm here.  
    // That is all you need to write for this class.  
    // For full credit, follow the naming conventions illustrated on p. 79.
```

```
}
```