CS56-S13-H05 page 1

First name (color-in initial)	А	В	С	D	Е	F	G	Н	ı	J	K	L	М	N	0	Р	Q	R	s	Т	U	V	W	Х	Υ	Z	section (10,or 11)	first name initial	last name initial
Last name (color-in initial)	А	В	С	D	Е	F	G	Н	I	J	K	L	М	N	0	Р	Q		S	Т	U	٧	W	Х	Υ	Z			

## H05: Due Thursday 04.11 in Lecture. Total Points: 50

## Number/String conversions, Random Numbers, Setters/Getters, TDD (HFJ Ch5)

MAY ONLY BE TURNED IN DURING Lecture ON Thursday 04.11, 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/S13: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 would appears in Gauchospace),
- writing either 10,11 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

## **Reading Assignment:**

- 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) (8 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) (8 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).

(5) (12 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.
```

- (7) Pages 101-103 allude to test-driven development, or "test-first" development as part of a methodology known as "eXtreme Programming". Test-first development is only one part of the XP mindset.
  - (a) (6 pts) List at least two aspects of the XP mindset that do NOT have to do with testing.
  - (b) (6 pts) What are some of the reasons that writing a test first can be helpful (by "writing a test first", we mean before writing the code to be tested).