

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 (9,10,11, 12,1 or 2)	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			

## H07: Due Monday, 01.26 in Lecture

### Function practice for Midterm 1 review (Savitch Ch 4)

Assigned: Tue 01.13

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/16wiki/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 9,10,11,12,1 or 2** 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.

*The questions on this homework review of concepts from recent labs and from lecture that you may need practice on before the next midterm exam.*

2. Suppose we have a program where the main starts with the line:

```
int main(int argc, char *argv[])
```

and the program is run with the following command line:

```
./myprog 12 dozen eggs
```

- (4 pts) What is the value of `argc`?
  - (2 pts) What is the value of `argv[2][2]`?
  - (2 pts) What is the value of `argv[1][0]`?
  - (2 pts) What is the value of `argv[0][1]`?
3. (10 pts) Suppose you have a different program that starts like this:

```
#include <iostream>
#include <cstdlib>
using namespace std;

int main(int argc, char *argv[])
{
    int numTickets;

    if (argc != 2)
    {
        cerr << "Usage: << argv[0] << " numTickets" << endl;
        exit(1);
    }

    // now assign the variable numTickets from the command line
```

Given the comment, and what you know about how command line arguments work, what should the next line of code be?

4. (20 pts) For each of the for loops below:

- Circle **infinite** if it is an infinite loop, or **finite** if it NOT an infinite loop
- Check the in the **no output column (X)** if the loop has no output
- If the loop has output, put it in the box.

Note: if the output will be infinite, just write the **output of the first three times through the loop**, then put three dots like this: ...

code	Infinite or finite?	No output?	write the output here (if any)
<pre>for (int i=0; i&lt;4; i--)   cout &lt;&lt; i &lt;&lt; endl;</pre>	infinite   finite	<input type="checkbox"/>	
<pre>for (int i=0; i&gt;1; i--)   cout &lt;&lt; i &lt;&lt; endl;</pre>	infinite   finite	<input type="checkbox"/>	
<pre>for (int i=1; i&gt;=4; i++)   cout &lt;&lt; i &lt;&lt; endl;</pre>	infinite   finite	<input type="checkbox"/>	
<pre>for (int i=1; i&lt;=4; i++)   cout &lt;&lt; i &lt;&lt; endl;</pre>	infinite   finite	<input type="checkbox"/>	
<pre>for (int i=0; i&lt;10; i+=2)   cout &lt;&lt; i &lt;&lt; endl;</pre>	infinite   finite	<input type="checkbox"/>	