CS150-01 Lab 7
Nested Loops

Date: Tuesday, October 12, 2003
Due: Tuesday, October 19, 2003
Total Points: 15

For this lab you are going to write a program to do different things with loops. You should include all of the following in your program. Complete each step before you move to the next one. If you are feeling adventurous then you can store the results to a file. Name your project "07LoopsPUNetId", mine would be "07Loopskhoj0332".

1. Write a segment that uses a nested 'for' loop that draws a rectangle of *'s for any inputted length and height. For example, if 3 was entered for the length and 2 was entered for the height, the rectangle drawn should look like this:

   ```
   ***
   ***
   ```

2. Write a program segment using a nested 'for' loop that draws a triangle for any inputted height. For example, if 4 was entered for the height, the program should draw the following triangle:

   ```
   *
   **
   ***
   ****
   ```

3. Write a program segment using a nested 'for' loop that draws an opposite triangle for any inputted height. For example, if 4 was entered for the height, the program should draw the following triangle:

   ```
      *
     **
    ***
   ****
   ```

4. Write a program segment using a nested 'for' loop that draws a triangle for any inputted height as shown below:

   ```
      *
     ***
    *****
   *******
   ```

5. Write a program segment using a nested 'for' loop that draws a diamond for any inputted, odd numbered height. For example, if 5 was entered for the height, the program would draw the following

```
  *
 ***
*****
 ***
  *
```

It might be helpful to think about the spaces as being some other symbol. That would make the output in section 3 be:

```
@@@*
@@**
@***
****
```

You will find it extremely helpful to use the debugger while writing this program.

If you finish all 5 program segments in class, then have your program checked in lab. Otherwise, place your project in the CS150-02 lab folder by Tuesday, October 19th.