

## SI@UCF Intro Python Homework Assignment: Stars

You will add three functions to the program stars.py that you have been reviewing in class. Here are the directions for each method you are to add to the program:

### **Function: Sideways Pyramid**

Edit the stars program that is posted on line to include a new function that prints out a sideways pyramid of a specified size. Your method should have the following prototype:

```
sidewaysPyramid(n, c);
```

This should print a sideways pyramid that takes up  $2n-1$  rows with the middle row having  $n$  copies of character  $c$ . Here is what your output should be if  $n = 5$  and  $c = '^'$

```
^
^^
^^^
^^^^
^^^^^
^^^^^
^^^^
^^^
^^
^
```

After you write this method, edit main and the menu to include this as a choice for the user.

### **Function: Regular Pyramid**

Edit the stars program that is posted on line to include a new function that prints out a regular pyramid of a specified size. Your method should have the following prototype:

```
pyramid(n, c);
```

This should print a pyramid that takes up  $n$  rows with the last row having  $2n-1$  copies of character  $c$ . Here is what your output should be if  $n = 6$  and  $c = '#'$

```
  #
  ###
 #####
#####
#####
#####
```

After you write this method, edit main and the menu to include this as a choice for the user.

### **Function: Diamond**

Edit the stars program that is posted on line to include a new function that prints out a diamond of a specified size. Your method should have the following prototype:

```
diamond(int n);
```

The diamond that prints out should have  $2n-1$  rows. The middle row (row  $n$ ) should have  $2n-1$  of character  $c$  on it. Here is what the output should be if  $n = 4$  and  $c = '?'$

```
  ?
 ??
????
??????
??????
  ???
   ?
```

After you write this method, edit main and the menu to include this as a choice for the user.