

Project 1

CS 261

Save your program for this project as `<emailID>_project1.py` where `<emailID>` is the part of your Hampden-Sydney e-mail address before the `@` symbol. For example, I would save my program as `blins_project1.py`. When you are finished, e-mail your program to `blins@hsc.edu`. Your solution is due by 3pm on Friday, September 11.

Diamonds

For this project, you will write a function that can print a diamond made out of characters on the screen. Your function should have two parameters, one called `size` determines the size of the diamond. The other parameter called `char` determines which character the diamond is made from. When you are finished, your function should be able to print diamonds that look like these (and more):

```

              7              !
            o 777          !!!
          * ooo 77777      !!!!!
            o 777          !!!!!
              7              !!!
                      !
```

These four examples are different sizes, from 1 (on the left) to 4 (on the right). The command `diamond(4, "!")` should generate the diamond on the right.

Counting Characters

In addition to printing diamonds, your function should also print the number of characters (other than spaces) that are in the diamond. For example, the four example diamonds above contain 1, 5, 13, and 25 characters respectively. So the final output of your function on the last example should look something like this:

```

      !
     !!!
    !!!!!
   !!!!!!!
  !!!!!!!
 !!!!!!!
!!!!!!!
!

```

This diamond contains 25 characters.

Here is a link with some tips on how to get started:

<https://bclins.github.io/fall126/coms261/project1tips.pdf>