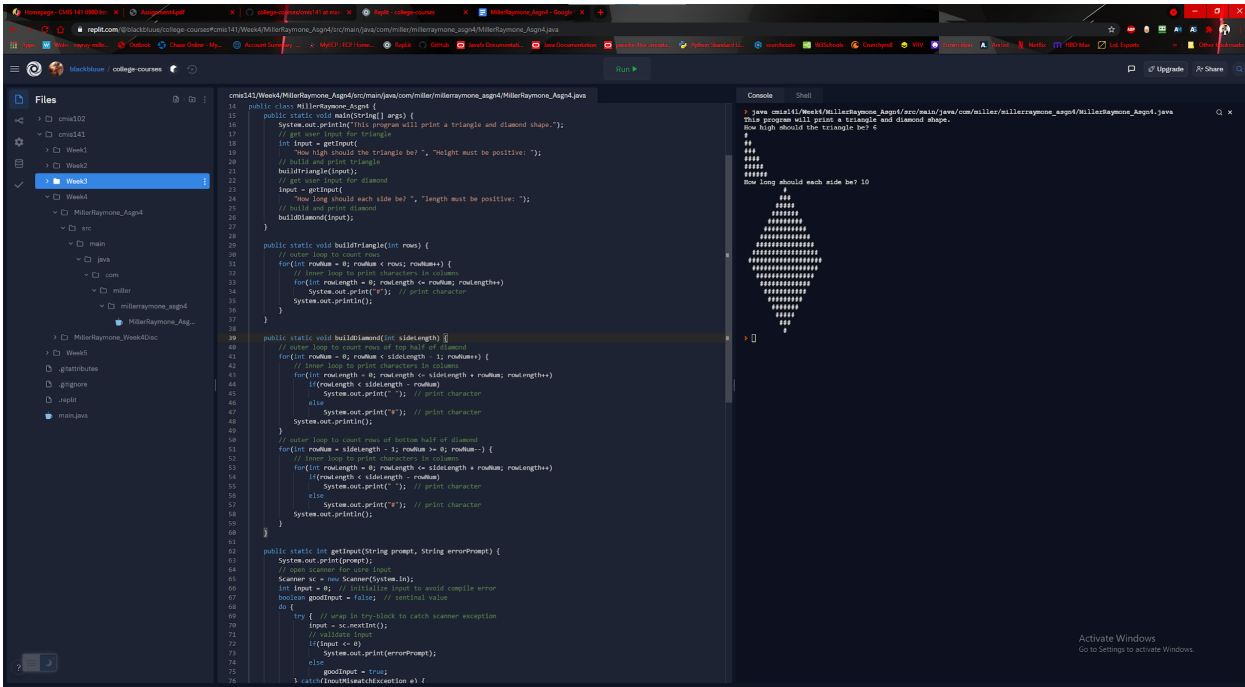


	How long should each side be? 3 # ### ##### ### #	How long should each side be? 3 # ### ##### ### #	
--	--	--	--

Test Case 1



Test Case 2

Test Case 4

```
14 public class MillerRaymond_Asg4 {
15     public static void main(String[] args) {
16         System.out.println("This program will print a triangle and diamond shape.");
17         // get user input for triangle
18         int input = getInput();
19         "Now high should the triangle be? ", "height must be positive: ");
20         buildTriangle(input);
21         // get user input for diamond
22         input = getInput();
23         "Now long should each side be? ", "length must be positive: ");
24         // build and print diamond
25         buildDiamond(input);
26     }
27
28     public static void buildTriangle(int rows) {
29         for(int rownum = 0; rownum < rows; rownum++) {
30             for(int rowlength = 0; rowlength <= rownum; rowlength++)
31                 System.out.print(" "); // print character
32             System.out.println();
33         }
34     }
35
36     public static void buildDiamond(int sidelength) {
37         // outer loop to count rows of top half of diamond
38         for(int rownum = 0; rownum < sidelength - 1; rownum++) {
39             // inner loop to print characters in column
40             for(int rowlength = 0; rowlength <= sidelength + rownum; rowlength++)
41                 if(rowlength <= sidelength - rownum)
42                     System.out.print(" "); // print character
43             else
44                 System.out.print("x"); // print character
45             System.out.println();
46         }
47         // outer loop to count rows of bottom half of diamond
48         for(int rownum = sidelength - 1; rownum >= 0; rownum--) {
49             // inner loop to print characters in column
50             for(int rowlength = 0; rowlength <= sidelength + rownum; rowlength++)
51                 if(rowlength <= sidelength - rownum)
52                     System.out.print(" "); // print character
53             else
54                 System.out.print("x"); // print character
55             System.out.println();
56         }
57     }
58
59     public static int getInput(String prompt, String errorPrompt) {
60         System.out.print(prompt);
61         // scan scanner for user input
62         Scanner sc = new Scanner(System.in);
63         int input = 0; // initialize input to avoid compile error
64         boolean goodInput = false; // sentinel value
65         do {
66             try { // use try-block to catch scanner exception
67                 input = sc.nextInt();
68                 // validate input
69                 if(input <= 0)
70                     System.out.print(errorPrompt);
71                 else
72                     goodInput = true;
73             } catch (InputMismatchException e) {
74                 System.out.print(errorPrompt);
75             }
76         } while (!goodInput);
77     }
78 }
```

```
> java com141/Week4/MillerRaymond_Asg4/eric/min/java/com/miller/milleraymond_asg4/MillerRaymond_Asg4.java
This program will print a triangle and diamond shape.
Now high should the triangle be? 3
#
###
#####
#####
#####
#####
#####
Now long should each side be? 3
#
###
#####
#####
#####
#####
#####
#####
```