

CS101 Section 4 & 5

November 4, 2015

Quiz No. 2

Alternative Simpler Solution

```
public class MyClass {  
    public static void main(String args[]) {  
        // Programmer: Fazli Can - November 4, 2015  
  
        int n; // n is odd int > 0  
        int noOfRows, noOfBlanks, noOfStars;  
        int i, j;  
        n = 11;  
  
        // Draw an upside up triangle.  
        noOfRows = n / 2 + 1;  
        noOfStars = 1;  
        noOfBlanks = n / 2;  
  
        for ( i = 1; i <= noOfRows; i++ )  
        {  
            for ( j = 1; j <= noOfBlanks; j++ )  
            {  
                System.out.print(" ");  
            }  
            noOfBlanks--;  
  
            for ( j = 1; j <= noOfStars; j++ )  
            {  
                System.out.print("*");  
            }  
  
            System.out.println( );  
  
            noOfStars = noOfStars + 2;  
        }  
  
        // Have separator in between.  
        System.out.println("\n" + "======" + "\n");  
  
        // Draw an upside down triangle.  
        noOfRows = n / 2 + 1;  
        noOfStars = n;  
        noOfBlanks = 0;  
  
        for ( i = 1; i <= noOfRows; i++ )  
        {  
            for ( j = 1; j <= noOfBlanks; j++ )  
            {  
                System.out.print(" ");  
            }  
            noOfBlanks++;  
  
            for ( j = 1; j <= noOfStars; j++ )  
            {  
                System.out.print("*");  
            }  
  
            System.out.println( );  
  
            noOfStars = noOfStars - 2;  
        }
```

```

// Have separator in between.
System.out.println("\n" + "======" + "\n");

// Draw an upside right triangle.

noOfRows = n;
noOfStars = 1;

for ( i = 1; i <= noOfRows; i++ )
{
    for ( j = 1; j <= noOfStars; j++ )
    {
        System.out.print("*");
    }
    System.out.println( );

    if ( i < n / 2 + 1 )
    {
        noOfStars++;
    }
    else
    {
        noOfStars--;
    }
}

// Have separator in between.
System.out.println("\n" + "======" + "\n");

// Draw an upside left triangle.

noOfRows = n;
noOfStars = 1;
noOfBlanks = n / 2;

for ( i = 1; i <= noOfRows; i++ )
{
    for ( j = 1; j <= noOfBlanks; j++ )
    {
        System.out.print(" ");
    }

    for ( j = 1; j <= noOfStars; j++ )
    {
        System.out.print("*");
    }
    System.out.println( );

    if ( i < n / 2 + 1 )
    {
        noOfBlanks--;
        noOfStars++;
    }
    else
    {
        noOfBlanks++;
        noOfStars--;
    }
}

} // End of main()
} // End of class

```

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