

LCS-ES Group Meeting #11

Exercise 1: Loops

The six pictures shown below were printed by a simple Java program.

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(consider adding a trunk!)

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```

The first picture was printed by the program shown below.

```
class Loops
{
    public static void printDesign1( int n )
    {
        // print n rows of increasing length
        for (int row=0; row<n; row++)
        {
            for (int col=0; col<row+1; col++)
            {
                System.out.print('*');
            }
            System.out.println();
        }
        System.out.println();
    }

    public static void main(String[] args)
    {
        int n = 7;
        printDesign1( n );
    }
}
```

Trace the code to understand how it works. Then choose one or more of the other pictures, and add new methods that print the pictures you've chosen. (Make sure that your methods work for any value of n greater than 0.)

Now design your own picture (some pattern of stars in an n-by- n box) and ask your neighbor to code it.

Exercise 2:

Today we will be playing a game to practice loops, boolean and numeric operators, precedence rules and string methods. The team that guesses the mystery phrase first wins!

Directions:

Break up into two teams.

Each team rolls the dice. The team with the highest roll has control of the category first.

The first member of the winning team rolls the dice again to pick a category:

- 1, 2 – Loops
- 3 – Boolean Operators
- 4 – Numeric Operators
- 5 – Precedence
- 6 – Choice

One member of each team competes to answer the given problem. The winner picks a card from the pile containing various string methods and may use this method to obtain information about the clue.

The winning team rolls the dice again to select the next category.

The first team to guess the clue wins! (Remember, you may only guess using the appropriate string methods)