Practice Midterm 1
Chapters 1 - 3

You have 50 minutes to work on this exam. Answer each question to the best of your ability. If you are stumped, or don't know how to write a specific piece of code, use comments, or sudo code, to describe the process or steps necessary to writing the program. As a suggestion, make tables to keep track of the variables in questions one and two if necessary.

Good Luck ☺

1. What is the output of the following program?

```java
public class practiceMidtermProblem1 {
    public static final int SIZE = 5;
    public static void main(String[] args) {
        for(int line = 1; line <= SIZE; line++) {
            for(int i = 1; i <= SIZE - line; i++) {
                System.out.print(i);
            }
            System.out.print("-");
            for(int j = SIZE - line; j >= 1; j--) {
                System.out.print(j);
            }
            System.out.println();
        }
    }
}
```

Output:

2. What is the output of the following program?

```java
public class MixedNumberSalad {
    public static void main(String[] args) {
        int x = 4;
        int eight = 2;
        int one = 8;
        String y = "three";
        String z = "7";
        String ten = "one";

        addFour(x, one);
        subtractFive(ten, y, z);
        String four = getFive(z, x);
        System.out.print(four);
    }

    public static void addFour(int eight, int x) {
        System.out.println(x - eight + 10);
    }

    public static void subtractFive(String eight, String four, String one) {
        System.out.print(four + " " + eight + " " + one + " ");
    }

    public static String getFive(String x, int z) {
        z = z + 10;
        return "x + z";
    }
}
```

Output:

3. Write a program to produce the following pattern. Use a public final static int SIZE; to determine the size of the pattern that needs to be generated. Below are the outputs for sizes 4 and 5:

```
Size 4
/////////////*******\\\\\\\\\\\\
///////********************\\\\\\\\
////**********************\\\\
***************************

Size 5
//////////////*******\\\\\\\\\\\\\\\\
///////////****************\\\\\\\\\\\\
///////**********************\\\\\\\
////****************************\\\\
***********************************
```

Write out the whole program code, including the class name and main method.