

## CIS1068: Quiz 4 (60 pts) Name(**print**) ---

1. Develop a program to fulfill the following task: Read in an integer via the keyboard, and store it in a variable b. After that, display an  $b \times b$  square of ‘\*’. For instance, if the user enters an integer number 4, the screen will display:

```
****  
***  
***  
***
```

2. Develop a program to display a triangle of ‘\*’. The size is determined by the input via keyboard. For instance, if the user enters an integer number 4, the screen will display:

```
*
```

  

```
**
```

  

```
***
```

  

```
****
```

3. Develop a program to display the triangle of ‘\*’ that is a left/right reversal of the one in Question 2. The size is determined by the input via keyboard. For instance, if the user enters an integer number 4, the screen will display:

```
*
```

  

```
**
```

  

```
***
```

  

```
****
```

4. Develop a program to display the triangle of ‘\*’ that is a up/down reversal of the one in Question 3. The size is determined by the input via keyboard. For instance, if the user enters an integer number 4, the screen will display:

```
****  
***  
**  
*
```

5. Develop a program to display the following shape. The size is determined by the input via keyboard. For instance, if the user enters an integer number 4, the screen will display:

```
*
```

  

```
***
```

  

```
*****
```

  

```
*****
```

```
5 Scanner kb = new Scanner (System.in);
6 int b = kb.nextInt();
7 int i, j, k;
8
9 for(i = 0; i < b; i++){
10     for(j = 0; j < b; j++)
11         System.out.print("*");
12     System.out.println();
13 }
14
15 for(i = 0; i < b; i++){
16     for(j = 0; j <= i; j++)
17         System.out.print("*");
18     System.out.println();
19 }
20
21 for(i = 0; i < b; i++){
22     for(k = 0; k < b-i-1; k++)
23         System.out.print(" ");
24     for(j = 0; j <= i; j++)
25         System.out.print("*");
26     System.out.println();
27 }
28
29 for(i = 0; i < b; i++){
30     for(k = 0; k < i; k++)
31         System.out.print(" ");
32     for(j = 0; j < b-i; j++)
33         System.out.print("*");
34     System.out.println();
35 }
36
37 for(i = 0; i < b; i++){
38     for(k = 0; k < b-i-1; k++)
39         System.out.print(" ");
40     for(j = 0; j < 2*i+1; j++)
41         System.out.print("*");
42     System.out.println();
43 }
44
```