CMSC131, Spring 2024, QUIZ #2 (DURATION: 25 MINUTES) – 30 pts

FIRSTNAME, LASTNAME (PRINT IN UPPERCASE): | **KEY**

STUDENT ID (e.g. 123456789):

INSTRUCTIONS:

1. Based on what you learned in lab, what does the following print?

   `System.out.println("CMSC131".charAt(2));`   **Answer: S**

2. In your own words, what does short-circuit evaluation with an && operator mean? No more than a 2 sentence answer.

   Answer: If the first condition is false, it will not evaluate the second since the whole && expression will be false regardless of whether the second condition is true or false.

3. What does the following print?

   ```
   int x = 29;
   int y = x++;
   System.out.println(y++);
   ```

   Answer: 29

4. Write a program that will print an uppercase E. If the number of **rows** is less than 5 or if it is not odd, simply print **Bad input**. Otherwise print an E that has number of rows being equal to the variable **rows**. The first, middle, and last row should have 2 less * than the value of **rows**, and all other rows should have one *. Since rows will always be odd, think about how you can use integer division to figure out which row will be the middle row. You cannot use a **return** in your code or print out a space (e.g. **System.out.print(" ");).** Also, no library methods other than what is given, using **print** and **println**, **nextInt**, and closing the scanner. See sample runs below with the user input being underlined.

Sample run #1	Sample run #2	Sample run #3
Enter number of rows: 13 *********** * * * * * *********** * * * * * ***********	Enter number of rows: 9 ******* * * * ******* * * * *******	Enter number of rows: 12 Bad input

WRITE THE CODE ON THE BACK

```java
import java.util.Scanner;

public class Quiz2 {

    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);
        int rows;

        System.out.print("Enter number of rows: " );
        rows = input.nextInt();

        if(rows < 5 || rows % 2 !=1){
            System.out.println("Bad input");
        }
        else {
            for(int i = 1; i<=rows; i++) {
                if(i == 1 || i == rows || i == rows/2+1) {
                    for (int j =1; j<=rows-2; j++) {
                        System.out.print("*");
                    }
                    System.out.println();
                }
                else {
                    System.out.println("*");
                }


            }


        }

        input.close();







    }

}
```