

Computer Science AP

Chapter 4 – File I/O with control statements

Create an image of your initials using “*” and “ ”.

In this program, you will create an image of your initials by reading a text file containing numbers representing the quantity of asterisks (“*”) and blanks (“ ”) to print. The combinations of asterisks and blanks will produce an image of your initials. Every positive number in the file represents an asterisk and every negative number represents a blank. A zero means the line is complete. Use the Scanner class to access the file. Use a loop to continually read the file until the file reaches an EOF (End-Of-File) control sequence. Use if statements to determine whether the number read is positive, negative or zero and execute the statements to draw your initial.

Your image should be at least 10 lines high and as wide as necessary to construct the letter. There should be two columns of asterisks between each letter.

The statements below will define a Scanner object that reads data from a text file. Create a .txt file in NotePad that contains the numbers your program needs to draw your initials.

```
public static void main (String [] args) throws FileNotFoundException {  
    int num;  
    Scanner reader = new Scanner (new File(/* file name, full path, in quotes */ ));  
    PrintWriter writer = new PrintWriter  
        (new File(/* file name, full path in quotes */ ));  
    while (reader.hasNext() ) {    // reads until EOF  
        num = reader.nextInt();  
  
        writer.print ("*");  
    }  
    writer.close();  
}
```

Sample .txt file and output for the letter “F”.

7 0	* * * * *
1-4 2 0	* * *
1-1 5 0	* * * * *
1-1 5 0	* * * * *
1-1 5 0	* * * * *
1-3 3 0	* * * * *
1-1 5 0	* * * * *
1-1 5 0	* * * * *
7 0	* * * * *