

Worksheet: Loops and Nested Loops

1. Complete the following methods according to their *JavaDoc* comments.

a)

```
/**
 * This method takes a parameter of type char and prints
 * that character on the same line the number of times that
 * is specified in the int parameter "numTimes"
 * @param c the character to be printed
 * @param numTimes the number of times to print the character
 */

public static void printCharRepeatedly(char c, int numTimes) {
    while( numTimes > 0 ) {
        System.out.print(c);
        numTimes--;

        for(int i=0; i < numTimes; i++ ) {
            System.out.print(c);
        }
    }
}
```

b)

```
/**
 * This method prints prints the character given in
 * the char parameter "c" in a matrix of dimensions
 * given in parameters "x" and "y"
 * @param c the character to print
 * @param x the number of copies of the character on each line
 * @param y the number of lines to print
 */

public static void printCharGrid(char c, int x, int y) {
    while(y > 0) {
        int z = x;
        while(z > 0) {
            System.out.print(c);
            z--;
        }
        System.out.println();
        y--;

        for(int i=1; i <= y; i++) {
            for(int j=1; j <= x; j++) {
                System.out.print(c);
            }
            System.out.println();
        }
    }
}
```