

## Assignment 3

Output:



The screenshot shows the Eclipse IDE interface. The Package Explorer on the left displays the project structure: com.Depaul.DataStructures.Hw3, which includes src, algs11, CrossWord.java, and Square.java. The main editor shows the code for CrossWord.java, which defines a public class CrossWord with a private Square[] puzzle. The constructor takes a boolean[][] blackSquares and initializes the puzzle array. It then iterates over the blackSquares array, creating Square objects and setting their puzzle[r][c] values. The console at the bottom shows the output of the program, which is a 10x10 grid of numbers representing the puzzle state.

```
1 package algs11;
2
3 public class CrossWord {
4     private Square[] puzzle;
5
6     public CrossWord(boolean[][] blackSquares) {
7         puzzle = new Square[blackSquares.length][blackSquares[0].length];
8         int number = 1;
9         for (int r = 0; r < blackSquares.length; r++) {
10             for (int c = 0; c < blackSquares[0].length; c++) {
11                 if (blackSquares[r][c]) {
12                     puzzle[r][c] = new Square(true, 0);
13                 } else {
14                     if (tobeLabeled(r, c, blackSquares)) {
15                         puzzle[r][c] = new Square(false, number);
16                         number++;
17                     } else {
18                         puzzle[r][c] = new Square(false, 0);
19                     }
20                 }
21             }
22         }
23     }
24 }
```

Problems | Javadoc | Declaration | Console | Debug

<terminated> CrossWord [Java Application] C:\Users\mores\p2\pool\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86\_64\_17.0.4.v20220903-1038\jre\bin\javaw.exe (Oct 2, 2022, 1:56:44 P

012000345  
600708000  
9000100000  
1100120001314  
00015001600  
1718190020000  
21000002200

algs11.CrossWord.java - com.Depaul.DataStructures.Hw3/src