

## LAB EXERCISE

### Squeeze

#### **Background:**

When text files are saved to disk, there are various methods for compressing files to take up less space. For Java source codes, many lines of a program have leading blank spaces, which take up unnecessary space. One way of conserving disk space is to count the number of blanks at the beginning of a line and save the count as an integer.

#### **Assignment:**

1. In the `main` method, open two files:
  - a. An input file linked to the original text file, the before version.
  - b. An output file linked to a new file name, the after version.
2. The program will remove the blanks at the beginning of each line and replace them with an integer count of the number of blanks present. You may use the `String.charAt()` method in this lab. Use a `Format.right(value, 2)` format-specifier from the `Format` class in `apcslib` to print the integer. Two spaces should follow after the integer value, then the rest of the line should be transferred unchanged.

#### **Instructions:**

1. Run your program on an old source code text file that has a great amount of indentation. Include at least three levels of indenting.
2. Again, make sure the file name you are "saving as" does not wipe out an existing text file.
3. Display your source code and then a "before" and "after" look. If you want, run *Squeeze.java* on itself, but make sure you have a backup disk copy somewhere else. Call your instructor to your workspace for scoring.
4. An example is provided on the next page.

### Before Squeezing:

```
// A short example file

private double singleTax ()
{
    if (income <= 27050.0)
        return (income * 0.15);
    else if (income <= 65550.0)
        return (4057.5 + (0.275 * (income - 27050.0)));
    else if (income <= 136750.0)
        return (14645.0 + (0.305 * (income - 65550.0)));
    else if (income <= 297350.0)
        return (36361.0 + (0.355 * (income - 136750.0)));
    else
        return (93374.0 + (0.391 * (income - 297350.0)));
}
```

### After squeezing:

```
1 // A short example file
0
0 private double singleTax ()
0 {
4 if (income <= 27050.0)
8 return (income * 0.15);
4 else if (income <= 65550.0)
8 return (4057.5 + (0.275 * (income - 27050.0)));
4 else if (income <= 136750.0)
8 return (14645.0 + (0.305 * (income - 65550.0)));
4 else if (income <= 297350.0)
8 return (36361.0 + (0.355 * (income - 136750.0)));
4 else
8 return (93374.0 + (0.391 * (income - 297350.0)));
0 }
```