

## Refactoring

### Extract Method

In each class, I have a small for loop that calculates the amount of tabbing required. Since EACH class uses this duplicate code, I used **extract method** to move this functionality into its own class

```
// handling formatting
String tab = "";
for(int i=0; i<depth; i++){
    tab += "\t";
}
String tab2 = tab + "\t";
```

Becomes:

```
// handling formatting
String[] tabs = getTab(depth);
String tab = tabs[0];
String tab2 = tabs[1];
String tab3 = tabs[2];
String tab4 = tabs[3];
```

### Using method

```
private static String[] getTab(int depth){
    String[] tab = new String[4];
    for(int i=0; i<depth; i++){
        tab[0] += "\t";
        tab[1] += "\t";
        tab[2] += "\t";
        tab[3] += "\t";
    }
    tab[1] += "\t";
    tab[2] += "\t\t";
    tab[3] += "\t\t\t";

    return tab;
}
```

I did tests by comparing outputs (scripts 1 to 8) and ensuring that the output and formatting was exactly the same.