Tutorial Quiz #6 — Solutions

Consider the following Java code (set in two columns to save space).

```java
class A {
    static int val = 3;
    int mine = 4;
    static void doIt() { val++; }
}
class B extends A {
    static void doIt() { val--; }
    void take() { mine = val; }
}
class C extends A {
    static int mine = 2;
    int val = 5;
}
public class D {
    public static void main() {
        B b = new B();
        C c = new C();
    }
}
```

Below, draw the Static Space for the code above.

**Answer:**

```
<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>Object</th>
<th></th>
<th>B</th>
<th>A</th>
<th></th>
<th>C</th>
<th>A</th>
<th></th>
<th>D</th>
<th>Object</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>val</td>
<td>3</td>
<td></td>
<td>doIt()</td>
<td></td>
<td></td>
<td>mine</td>
<td>2</td>
<td></td>
<td>main()</td>
<td></td>
</tr>
</tbody>
</table>
```

**Marking Scheme:**

A. 1 mark for having one box for each class, with the name of the class in the upper left-hand corner

B. 1 mark for having the correct name of the parent class in the upper right-hand corner of each box

C. 1 mark for having the correct static method names in each relevant box

D. 1 mark for having the correct static variable names and values in each relevant box

E. 1 mark for *not* having any extra incorrect information in each box