**Lilla Nagy**

**Testing Part 2 Homework**

Here are the requirements:

If the temperature falls below 18 degrees, the heating is switched on. When the temperature reaches 21 degrees, the heating is switched off.

Create a Word document with the following information:

1. Create the list of scenarios / equivalence class partitions to test these requirements. Provide also the expected results.
2. Select a set of test data to cover the above scenarios.
3. Which are the boundaries that you would use? Which are expected results for each boundary?

1.

I. If the temperature falls below 18 degrees (as soon as it is 17 degrees) the heating is switched on. So at 17 degrees or under it: heating is SWITCHED ON.

🡨 17 : SWITCHED ON

II. The heating remains switched on when the temperature raises from 17 to 18, 19, 20.

18 -19 -20: remains SWITCHED ON

III. When temperature reaches 21 degrees, the heating is SWITCHED OFF. Any temperature above 21 the heating remains switched off.

21 🡪: SWITCHED OFF

IV. When temperature decreases from 21 degrees, the heating is still switched off, so at 20, 19 and 18 degrees it still is switched off, buta s soon as it reaches 17 degrees again, it is switched on.

21 – 20 – 19 -18 : remains SWITCHED OFF

The conclusion is that at values 18, 19, 20 degrees the temperature can be switched on and off, depending on the „direction” of temperature, wether it is increasing or decreasing, wether it goes from 17 up or from 21 down.

2.

|  |  |  |
| --- | --- | --- |
| **Values/Test Data** | **Expected Outcome** | **Class Covered** |
| 16 | heating SWITCHED ON | 1 |
| 19 | heating SWITCHED ON if temperature is raising from 17 | 2 |
| 22 | heating SWITCHE OFF | 3 |
| 19 | heating SWITCHED OFF if temperature is decreasing from 21 | 4 |

3.

Boundaries: 17, 18, 20, 21

|  |  |
| --- | --- |
| **Values/Test Data** | **Expected Outcome** |
| 17 | heating SWITCHED ON |
| 18 | heating remains SWITCHED ON (until it receives 21)  heating remains SWITCHED OFF (when decreasing, until reaches 17) |
| 20 | heating remains SWITCHED ON (until it receives 21)  heating remains SWITCHED OFF (when decreasing, until reaches 17) |
| 21 | heating SWITCHED OFF |