

Lab lecture exercises – Week 3

1lE means that a bottle contains a minimum of 1 litre estimated. EU regulations (see http://en.wikipedia.org/wiki/Estimated_sign) specify the maximal negative tolerance for these estimates. For instance, an item marked 50mlE must contain at least 45.5ml (that is, 50ml minus 4.5ml accepted tolerance); or an item marked as 400ml at least 388ml (that is, 400ml minus $3\% \cdot 400\text{ml}$). The permitted tolerances are:

nominal quantity in ml	maximal negative error
5-50	9%
50-100	4.5 ml
100-200	4.5%
200-300	9 ml
300-500	3%
500-1000	15 ml
1000-10000	1.5%

Write a class **Estimate** by expanding the method stub that can be found in the file **Estimate.java** in the **lab03.zip** handout on Canvas (or as **/home/staff/mmk/dropbox/wk03/Estimate.java** on the School's file system).

Test your program with the JUnit Test file provided:

EstimateTest.java

Note in test driven development you write first the tests and then refine the program until all tests pass.