Comments on the exam in Computer Architecture 21/8/2004

Answers are found in the textbook. Comments on some of the questions:

4. 5
7. 113 (or 0x71), since the 16-bit word is 0x0071 where 0x00 is the most significant byte, getting the lowest byte address (0) in big-endian.
14. Because MBR contains assembly instruction opcodes and they are only 8 bits wide in MIC.
28. No. Branch prediction guesses what the next instruction will be. In a non-pipelined CPU this information is of no value since the next instruction cannot be started anyway. (It may be of value to prefetch it though, so I’ll accept “yes” if that motivation is given.)
30. To preserve the value of the integer in case it is negative.

Results

16 persons sat the exam (from various programmes and years). 7 (=44%) scored at least the 20 points required for grade G, and 2 (=13%) at least 25 points, thus gaining one extra credit towards a higher grade for the course. The median result is 18 and the mean 17.9. A histogram of results is shown below.

Graded exams can be collected at the Kansli, Building 4.

21/8/2004
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