Class exercise: Tools for organizing data

COMP 40

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Group

Keeper of the record:
Other group members:

Questions

1. List all ways of representing data in C++. There are an infinite number of data structures, so you'll have to identify the language constructs used to create new data. There are surprisingly few.

2. For the moment, let's pretend our course hardware offers only three representations of data: the 8-bit byte, the 64-bit word, and the 32-bit halfword.[1] For each kind of data mentioned in question 1, *how would you represent it using bytes, words, and halfwords?*

[1] The real hardware also offers a 16-bit quarter-word and some 80-bit registers, plus Intel uses different names for everything except a byte. That's history for you.