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The following figure solves the quiz question after applying a simple optimisation technique. Note that the data dependency between two operations will define their execution sequence. If there is no data dependency between two operators, their execution order can be decided by the synthesis tool. Therefore, we should not consider any specific execution order among the independent operations when we write a hardware description code in HLS. For example, although in the source code Operator 1 is before Operator 2, these two operators can be executed at the same time or one after another in the order decided by the HLS tool.

