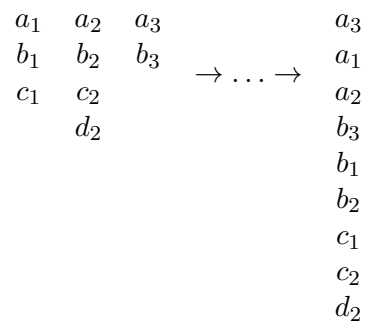# Quiz #1 of Erlang

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This time it is about shuffling three stacks in the following way (the top of the stacks is on the top of the figure):

$$
\begin{array}{ccc}
a_1 & a_2 & a_3 \\
b_1 & b_2 & b_3 \\
c_1 & c_2 & \\
& d_2 &
\end{array}
\quad \rightarrow \ldots \rightarrow \quad
\begin{array}{c}
a_3 \\
a_1 \\
a_2 \\
b_3 \\
b_1 \\
b_2 \\
c_1 \\
c_2 \\
d_2
\end{array}
$$

If the three stacks are empty, then the result is empty too.

Questions. Define `shuffle3/3`

1. without tail recursion;

2. with tail recursion.