Example:
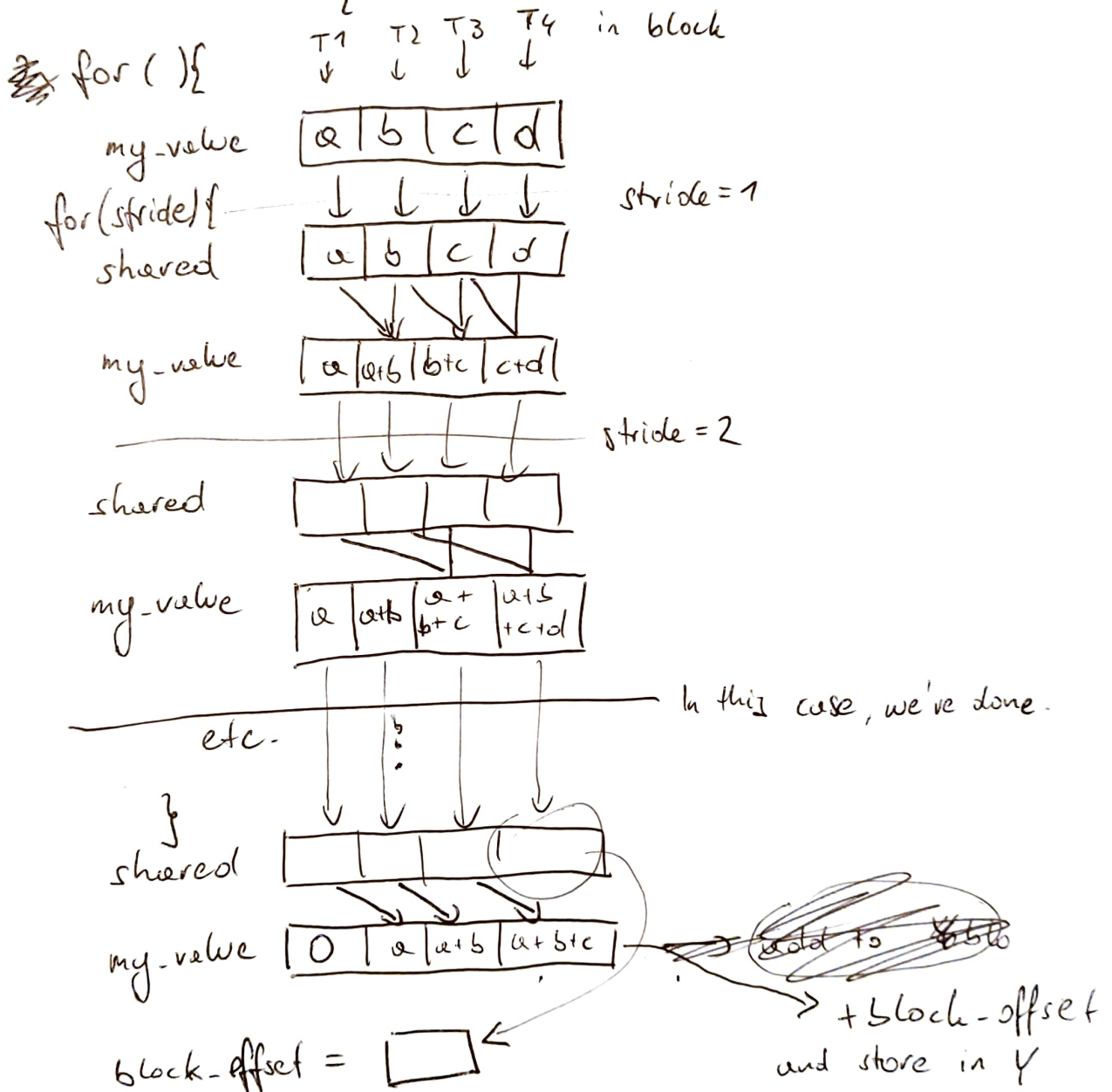
- 3 blocks à 4 threads → B1, B2, B3

  Vector X → Result Y   (length arbitrary, but assume longer than 12)

---

scan_kernel_1(..){

~~for ( ){~~

     T1   T2   T3   T4   in block

my_value

| a | b | c | d |

for(stride){   stride = 1

shared

| a | b | c | d |

my_value

| a | a+b | b+c | c+d |

                 stride = 2

shared

| | | | |

my_value

| a | a+b | a+
b+c | a+b
+c+d |

                In this case, we've done.

etc.

}

shared

| | | | |

my_value

| 0 | a | a+b | a+b+c | → ~~add to~~ ~~bbb~~

→ + block-offset
and store in Y

block-offset = [⬚] ←

}

~~write~~ write carries:

| B1 ▮ | B2 ▮ | B3 ▮ | ...

carries

| | | | ...