INPUT

#athletes = 8

° TIMES   DB 8+3 DUP (?)

```
[0]              [1]              [2]
┌─┬─┬─┬─┬─┬─┬─┬─┬─┬─┬─┬─┬─┬─┬─┬─┬─┬─┬─┬─┬─┬─┬─┬─┐
│A│A│A│A│A│A│A│A│C│C│C│C│C│C│C│S│S│S│S│S│S│M│M│M│
└─┴─┴─┴─┴─┴─┴─┴─┴─┴─┴─┴─┴─┴─┴─┴─┴─┴─┴─┴─┴─┴─┴─┴─┘
```
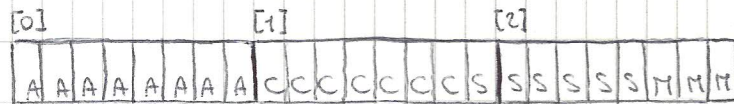
A = # athlete (8 bits)

C = cents of second (7 bits)

S = seconds (6 bits)

M = minutes (3 bits)

° WR   DW   ?   ← World Record (same format as above)
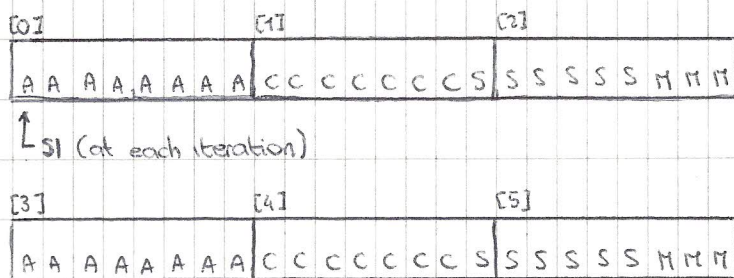
OUTPUT

° STANDINGS DB 8+3 DUP (?)   ← Ordered times   (same format as TIMES)

  ↳ from fastest to slowest

ITEM 1

• Copy TIMES array in STANDING array

• Sort STANDINGS array by comparing minutes, then seconds and then cents of two consecutive
  entries. If the first entry has a bigger time, exchange the values of the two entries.

Representation of two consecutive entries:

```
[0]              [1]              [2]
┌─┬─┬─┬─┬─┬─┬─┬─┬─┬─┬─┬─┬─┬─┬─┬─┬─┬─┬─┬─┬─┬─┬─┬─┐
│A│A│A│A│A│A│A│A│C│C│C│C│C│C│C│S│S│S│S│S│S│M│M│M│
└─┴─┴─┴─┴─┴─┴─┴─┴─┴─┴─┴─┴─┴─┴─┴─┴─┴─┴─┴─┴─┴─┴─┴─┘
 ↑ SI (at each iteration)

[3]              [4]              [5]
┌─┬─┬─┬─┬─┬─┬─┬─┬─┬─┬─┬─┬─┬─┬─┬─┬─┬─┬─┬─┬─┬─┬─┬─┐
│A│A│A│A│A│A│A│A│C│C│C│C│C│C│C│S│S│S│S│S│S│M│M│M│
└─┴─┴─┴─┴─┴─┴─┴─┴─┴─┴─┴─┴─┴─┴─┴─┴─┴─┴─┴─┴─┴─┴─┴─┘
```

ITE 2

- Two consecutive entries are represented as in item 1

- Compute the difference between the second entry's time and the first entry's time,
  by subtracting first the cents, then the seconds and at the end the minutes
  (PAY ATTENTION to the BORROW!)