2017 ... BROKERS DOOM

In *"The Masked Lady Brokers Doom"* our insightful individual was required to infiltrate an insidious investment institution, inducted by illustrating ingenuity and interpreting increasingly impenetrable (if insipid) instructional intricacies.

In her antepenultimate test she was required to trade a single unit of Z– (a particularly exotic commodity) and make a target profit; being allowed either to buy a Z– at the start of a chosen period before selling it at the end, or selling a Z– at the start of the period then buying it back at the end. Our heroine was shown a record of the changes in the price of Z– over time and instructed to make *at least*, and *as close as possible to*, a target. The chosen period had to contain at least one (possibly 0 valued) change.

For example, suppose that the record was -5 9 9 -6 -4 -5 100:
- A profit of 7 is made exactly by choosing the period -5 9 9 -6 (buying initially);
- 11 cannot be made exactly. The closest sum (exceeding 11) is 12, by choosing 9 9 -6 (buying initially);
- 10 can be made exactly from -6 -4 (selling initially);
- 14 cannot be reached but 15 can from -6 -4 -5 (selling initially);
- A target of 19 requires -6 -4 -5 100 (buying initially); the 18 attainable from 9 9 does not reach the threshold;
- A target of 0 cannot be made exactly.

SAMPLE INPUT

```
7  19
–5
9
9
–6
–4
–5
100
```

SAMPLE OUTPUT

```
85
```