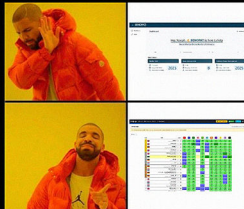


DOM

Yoseph Kevin Hendrata

Time Limit	1s
Memory Limit	256MB



Deskripsi Soal

Sebuah insiden keamanan digital terjadi ketika sebuah server lama milik kelompok tertutup Dombest tiba-tiba aktif kembali setelah bertahun-tahun tidak terdeteksi. Server itu hanya hidup selama beberapa detik, namun cukup lama untuk mengirimkan satu fragmen data mentah tanpa identitas apa pun. Tidak ada header, tidak ada penanda, hanya deretan angka positif dan negatif yang terlihat seperti potongan sinyal yang rusak.

Komunitas intelijen siber lama meyakini bahwa pola angka seperti ini tidak pernah dikirim secara acak. Di baliknya tersimpan sebuah SECRET: rangkaian angka berurutan dengan total energi terbesar, yang diyakini sebagai kunci akses menuju arsip tersembunyi milik Dombest.

Sebagai analis forensik digital, tugasmu adalah mengekstrak energi terbesar yang mungkin terkandung dalam sinyal tersebut, beserta urutan angka yang membentuk SECRET itu. Jika seluruh angkanya bernilai negatif, pilih angka dengan kerusakan paling kecil. Jika hasil akhirnya bernilai nol, berarti fragmen yang tertangkap tidak memuat informasi penting.

Format Masukan

Baris pertama berisi sebuah bilangan bulat N yang melambangkan jumlah entri sinyal yang berhasil ditangkap.

Baris kedua berisi N bilangan bulat, masing-masing menggambarkan nilai energi sinyal, baik penguatan (positif) maupun gangguan (negatif).

Format Keluaran

Baris Pertama

Jika total energi yang diraih nol, maka cetak "No usable signal detected! The fragment dissolves into pure static!"

Jika total energi yang diraih bernilai positif, maka cetak "Peak energy resonance at <num>! Clearance granted, Dombest archives unlocked!"

Jika total energi yang diraih bernilai negatif, maka cetak "Critical instability detected with energy drain of <num>! The Dombest fragment is collapsing!" (*poin dalam angka positif*)

Baris Kedua

Berisikan rangkaian angka berurutan yang membentuk SECRET.

"CODE: <SECRET>" (*dipisahkan menggunakan spasi*)

Batasan

$$1 \leq N \leq 10^5$$

$$-10^{13} \leq N_i \leq 10^{13}$$

Contoh Input 0

```
8
-2 -3 4 -1 -2 1 5 -3
```

Contoh Output 0

```
Peak energy resonance at 7! Clearance granted, Dombest archives unlocked!
CODE: 4 -1 -2 1 5
```

Penjelasan Output 0

Sub-fragmen dengan total energi terbesar adalah [4 -1 -2 1 5], menghasilkan energi 7, sehingga itulah SECRET yang harus diekstraksi.

Contoh Input 1

```
4  
-2 -5 -1 -6
```

Contoh Output 1

```
Critical instability detected with energy drain of 1! The Dombest fragment is collapsing!  
CODE: -1
```

Penjelasan Output 1

Semua entri bernilai negatif, sehingga hanya dipilih satu angka dengan kerusakan paling kecil, yaitu -1, yang menjadi SECRET.

Contoh Input 2

```
5  
-2 0 -1 0 -1
```

Contoh Output 2

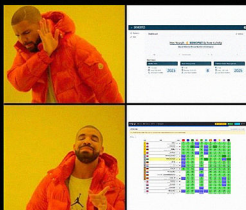
```
No usable signal detected! The fragment dissolves into pure static!  
CODE: 0
```

DILARANG MENGGUNAKAN ALGORITMA DILUAR MODUL 0, 1, DAN 2

DOM

Yoseph Kevin Hendrata

Time Limit	1s
Memory Limit	256MB



Description

An unexpected digital-security incident occurred when an old server belonging to the secluded Dombest group suddenly came back online after years of being undetected. It remained active for only a few seconds, but long enough to transmit a single raw data fragment with no identifiable structure. No headers, no markers, only a series of positive and negative numbers resembling corrupted signal slices.

The cyber-intelligence community believes that sequences like this are never transmitted randomly. Hidden within them lies a **SECRET**: a consecutive sequence of numbers with the highest total energy, believed to be the access key to Dombest's concealed archive.

As a digital forensic analyst, your task is to extract the maximum energy contained within the signal, along with the sequence of numbers that forms the **SECRET**. If all values are negative, choose the number with the smallest damage. If the final result is zero, it means the captured fragment contains no meaningful information.

Input Format

The first line contains an integer N , representing the number of signal entries successfully captured.

The second line contains N integers, each describing the signal's energy value, either amplification (positive) or interference (negative).

Output Format

First Line

If the points earned are zero, print "No usable signal detected! The fragment dissolves into pure static!"

If the points earned are positive, print "Peak energy resonance at <num>! Clearance granted, Dombest archives unlocked!"

If the points earned are negative, print "Critical instability detected with energy drain of <num>! The Dombest fragment is collapsing!" (*number is shown as a positive number*)

Second Line

Print the sequence of consecutive numbers forming the SECRET.

"CODE: <SECRET>" (*separated by spaces*)

Constraints

$$1 \leq N \leq 10^5$$

$$-10^{13} \leq N_i \leq 10^{13}$$

Sample Input 0

```
8
-2 -3 4 -1 -2 1 5 -3
```

Sample Output 0

```
Peak energy resonance at 7! Clearance granted, Dombest archives unlocked!
CODE: 4 -1 -2 1 5
```

Explanation Output 0

The sub-fragment with the highest total energy is [4 -1 -2 1 5], producing a total of 7. Therefore, this sequence becomes the extracted SECRET.

Sample Input 1

```
4
-2 -5 -1 -6
```

Sample Output 1

```
Critical instability detected with energy drain of 1! The Dombest fragment is collapsing!
CODE: -1
```

Explanation Output 1

All signal entries are negative, so the fragment with the smallest damage, -1, is chosen as the SECRET.

Sample Input 2

```
5
-2 0 -1 0 -1
```

Sample Output 2

```
No usable signal detected! The fragment dissolves into pure static!
CODE: 0
```

USE ALGORITHMS OUTSIDE MODULES 0, 1, AND 2 ARE PROHIBITED