
Suffix sums

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Write a program that given a sequence of integers computes the last sequence element that is equal to the sum of subsequent values. If there is no such element, the message `not found` must be produced.

Your program **MUST** define and use the following subprogram, that returns a boolean indicating whether the vector contains any element equal to the sum of the subsequent values. In that case, the value of the last element with that property is stored in parameter `e`.

```
bool find_element(const vector<int>& v, int &e);
```

Use the following code as a basis for your `main()`:

```
int main() {
    int n;
    cin >> n;
    vector<int> seq(n);

    // ADD YOUR CODE HERE

    int elem;
    bool found = find_element(seq, elem);
    if (found) cout << elem << endl;
    else cout << "not found" << endl;
}
```

Exam score: 3.500000 **Automatic part:** 30.000000%

Input

An integer $n > 0$ followed by a sequence of n integers.

Output

The last integer in the sequence that is equal to the sum of subsequent sequence values. If there is no such element, the message `not found` must be produced.

Sample input 1

```
7
20 0 10 0 5 3 2
```

Sample input 2

```
2
3 1
```

Sample input 3

```
5
5 1 1 1 2
```

Sample output 1

```
5
```

Sample output 2

```
not found
```

Sample output 3

```
5
```

Sample input 4

```
6
5 0 0 0 0 1
```

Sample input 5

```
4
2 7 9 0
```

Sample output 4

```
not found
```

Sample output 5

```
0
```

Observation

Inefficient solutions will be penalized.

WARNING: Altering the parameters, name, or specified behavior of the required subprograms will render the solution INVALID.

Problem information

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