

Dalvik

Time limit: 1000 ms Memory limit: 256 MB

Given the following small code below, write a program that, given the three input values, returns the output.

```
if-gt v13,v4,:l3
    sub-int v13,v4
31
         ,v13
    :13
32
33
    move v17,v4
34
    move v18,v3
35
    :14
36
    add-int v17, v17
         ,v13
37
    add-int v18, v18
         ,v3
38
    if-le v18,v6,:l4
39
    move v18,v3
40
    :15
41
    sub-int v17,v17
         ,v9
    add-int v18,v18
42
         ,v3
43
    if-le v18, v12
         ,:l5
44
    if-ge v17, v4,:16
45
    move v5,v14
46
    move v6,v12
47
    move v7,v15
48
    move v8,v10
49
    move v9,v13
50
    :16
    add-int v12,v12
         ٧3,
    if-le v12,v2,:l0
52
53
    return v6
```

Standard input

The input contains a single integer T on the first line, the number of test cases.

Each of the next T lines has three integers A, B, and C.

Standard output

For each test case output R which is returned from the small code above when A, B, and C are inserted into the first three lines.

Constraints and notes

- $\begin{array}{l} \bullet \ 1 \leq T \leq 40 \\ \bullet \ 1 \leq A < 2^{32} \\ \bullet \ 1 \leq B < 2^{32} \\ \bullet \ 1 \leq C < 10^9 \\ \end{array}$

Input

Output

4 10 3 5 987 654 321 2023 1028 321 1229276485 55555555 3565

218 218 3418