#### Sum of two numbers in base 18 format

### Description

Write a function int\_to\_base18 that can convert an integer into another integer in a number of base 18 (新18進位New hexadecimal denoted by 0y0000). New 0~9,10~17 will be presented as '0'~'9','A'~'H' respectively.

Given two numbers which can be either normal integer or new hexadecimal, print the sum of two numbers in the new hexadecimal format.

Note: You have to use switch statement in function int\_to\_base18 to accomplish this assignment.

### Input

A single line that contains 1 number t, t is the number of test cases.

Next t lines that contains two numbers n and m. As mentioned above they may be in decimal or base 18 format.

#### Constraints:

- 1 <= t <= 200
- 0 <= n <= 2147483647(in decimal)
- 0 <= m <= 2147483647(in decimal)

Note: The base18 format of 0 is 0y0

### Output

Output sum of the 2 numbers in base 18 format. Each test case's answer needs to be separated by a new line.

Note: The sum of the 2 numbers won't exceed2147483647(in decimal), that is

```
0 <= sum <=2147483647(in decimal)</pre>
```

Note: The base18 format of 0 is 0y0

# Sample Input 1 🖹

## 4 27182818 1414213 123421 0y1H 0y8D10H 31415926 0y58H99 0y12B01

# Sample Output 1

```
Sum in hexadecimal number is: 0yF2787H
Sum in hexadecimal number is: 0y1330C
Sum in hexadecimal number is: 0yH1HFE3
Sum in hexadecimal number is: 0y6BA9A
```

#### Hint

You MUST include function int\_to\_base18(int n) in your code and TAs will check whether you use switch statement in the function and whether you implement the logicto convert input n to base18 format.





