

Problem Statement

Emilio has N relatives. During Christmas, the first relative gives him P pesos as a gift. For $2 \leq i \leq N$, the i^{th} relative gives exactly the same amount as the $(i - 1)^{\text{th}}$ relative. How much is the total money that Emilio receives from his relatives?

Input Format

The first line of input will contain an integer T , the number of test cases.

The next T lines will contain two space-separated integers, representing the values N and P , in that order.

Output Format

For each test case, output **Php**, a space, and then the answer to the question.

Constraints

$$1 \leq T \leq 100$$

Subtask 1 (20 points each):

$$1 \leq N, P \leq 2000$$

Subtask 2 (30 points each):

$$1 \leq N, P \leq 3 \cdot 10^9$$

Sample Input

```
2
3 500
2 2000
```

Sample Output

```
Php 1500
Php 4000
```

Explanation

In the first test case, Emilio has $N = 3$ relatives. The first relative gives him $P = 500$ pesos as a gift. The second relative gives him exactly the same amount as the first relative, and this amount is 500 pesos. Finally, the third relative gives him exactly the same amount as the second relative. This amount is 500 pesos. Hence, the total amount of money he receives is 1500 pesos.