A Million Dollar Problem 1

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Problem	Submissions	Discussions

- Hey Guys. This is Azax.

- Welcome to "Who wants to be a Millionaire". I am your host.

- Today I will give you a problem. If you can solve it trust me you worth a million dollar.

- While going to have a chicken chap I found a piece of paper with the following sub-routine. I found it very interesting.

```
int Function(int NUM){

int cnt = 0;

for(int i=1; i<=NUM; i++){

if(GCD(i, NUM)==1) cnt++;

}

return cnt;

}
```

Now the problem is I will give the answer of Function ( ).

you two integers M and N where M will always be a prime number. You need to calculate As the answer could be very big you need to find the answer modulo 1000,000,007.

Input Format

Input starts with an integer T which denotes the number of test cases.

The next T lines contain two integers M and N where M will always be a prime number.

Constraints

$1 <= T <= 10000$

$1 <= N <= 10^9$

$1 <= M <= 10^6$ and will always be a prime number.

Output Format

For each of the test cases

result of Function ( ) %

you need to print the result in the format "Case X: R" where X is the case number and R is the 1000000007.

Submissions: 0
Max Score: 500

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```cpp
1  #include <cmath>
2  #include <cstdio>
3  #include <vector>
4  #include <iostream>
5  #include <algorithm>
6  using namespace std;
7
8
9  int main() {
10     /* Enter your code here. Read input from STDIN. Print output to STDOUT */
11     return 0;
12  }
13
```

Line: 1 Col: 1

⬆ Upload Code as File   ☐ Test against custom input   Run Code   Submit Code

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