

# Factorial and divisorss

You have given number of testcases.

Each testcase have two space separated integer L and R. You have to find total value of  $\text{fun}(L)+\text{fun}(L+1)+\dots+\text{fun}(R)$ , where  $\text{fun}(x)$  is total number of positive divisors of x factorial. Since result may be large print it modulo 1000000007.

## Input

First line of input contains T total number of testcase.

Next T line contains space separated two integer L and R.

$1 \leq T \leq 1000000$

$1 \leq L \leq R \leq 1000000$

## Output

For each testcase output the result modulo 1000000007.

## Example

### Input:

```
10
1 9
6 7
2 4
7 8
1 3
10 10
3 5
6 7
1 10
6 6
```

### Output:

```
377
90
14
156
7
270
28
90
647
30
```