

# K12-OE Numbers

Rishi loves numbers and number patterns very much. He is interested in finding OE numbers in a range  $[a, b]$ . An OE number is a number whose sum of even digits  $[0, 2, 4, 6, 8]$  is greater than sum of odd digits  $[1, 3, 5, 7, 9]$ . Help him to count how many OE numbers are in range  $[a, b]$  {a and b inclusive}

Example:

- 4563:  $O = 5+3 = 8$ ,  $E = 4+6 = 10$ ,  $E > O$ , so 4563 is an OE number
- 1233,  $O = 1+3+3 = 7$ ,  $E = 2$ ,  $E < O$ , so 1233 is not an OE number
- 10,  $O = 1$ ,  $E = 0$ ,  $E < O$ , so 10 is not an OE number

## Input

The first line of the input file contains **T** which denotes the number of Test cases. The next **T** lines contains two space separated integers **a** and **b**.

$1 \leq a \leq b \leq 10^8$

$T \leq 35$ .

## Output

Print the number of OE numbers in range  $[a, b]$  {one number per line}

## Example

**Input:**

```
3
1 1
2 10
1 100000000
```

**Output:**

```
0
4
38379932
```