

## Canadian Computing Competition: 2000 Stage 1, Junior #2

The digits 0, 1, and 8 look much the same if rotated 180 degrees on the page (turned upside down). Also, the digit 6 looks much like a 9, and vice versa, when rotated 180 degrees on the page. A multi-digit number may also look like itself when rotated on the page; for example 9966 and 10801 do, but 999 and 1234 do not.

You are to write a program to count how many numbers from a given interval look like themselves when rotated 180 degrees on the page. For example, in the interval  $[1 \dots 100]$  there are six: 1, 8, 11, 69, 88, and 96.

Your program should take as input two integers,  $m$  and  $n$ , which define the interval to be checked,  $1 \leq m \leq n \leq 32000$ . The output from your program is the number of rotatable numbers in the interval.

You may assume that all input is valid.

## Sample Input

---

```
1
100
```

## Sample Output

---

```
6
```