

MATHEMATICAL GRAMMAR SCHOOL CUP
June 28, 2018 (ENG)

TASK1 WEEKEND

Time limit: 0.1 seconds

Memory limit: 5 MB

Write a program WEEKEND that will calculate how many weekend days are between two given dates. Weekend day is Saturday or Sunday nor before the start date nor after the end date. The first line of standard input contains the start date DD.MM.YYYY (day, month, year). The second line of standard input contains the end date DD.MM.YYYY (day, month, year). The only line of standard output contains only one number - the number of weekends. If the start date follows the end date, write 0 on standard output. Both dates are between 01.01.1900 (Monday) and 31.12.2100 (Friday) including those two dates.

Example 1

Input
23.02.2018
02.03.2018

Output
2

Example 2

Input
23.02.2020
01.03.2020

Output
3

Example 3

Input
30.01.2018
03.02.2018

Output
1

TASK 2 PALINDROMS

Time limit:0.3 seconds

Memory limit:64 MB

It is said that nonnegative integer number n is double palindrome if it constructed by concatenation of two equal length palindromes. For example, numbers 171848, 2233,17712332 are double palindromes. Numbers 12321, 17771232, 20203 are not double palindromes. The first line of standard input contains two numbers k and d ($2 \leq k \leq 22$, k is even number, $1 \leq d \leq 10^6$) separated with space. The only line of standard output contains only one number - the number of different k -digits double palindromes divisible by d .

Input:

2 13

Output:

7