Q1 Optimize the temperature control strategy

Description

Suppose you are developing a temperature monitoring and regulation function for a smart home system. The system is equipped with temperature sensors in **three** rooms, one in the living room, the bedroom and the kitchen. These sensors record the temperature of the room in real time and transmit the data to a central control system.

In order to ensure the comfort of the entire home environment, you need to calculate the **average** of the **maximum** and **minimum** temperatures in the three rooms. This step can help you understand the current temperature differences between rooms and can be used to adjust the central air conditioning and heating system.

Input

In each case, the first line contains three numbers m,n,k representing the temperature of the living room, bedroom, and kitchen in turn.
(0<=m,n,k<=100)

Output

The average of the maximum and minimum temperatures in the three rooms. Keep **two** decimal places rounded.

Samples

Input1

```
36 37 38
```

Output1

```
37.00
```

Input2

```
36.57 37.4 38.39
```

Output2

```
37.48
```

Q2 barcode

Description

It's time for the annual shopping carnival!!! Your company is swamped with orders. The most important thing is that you need to set the **barcode** of all goods before they leave the factory. You decide to develop a software system to process the barcode of goods.

Each item has a **six**-digit barcode, and you need to split that barcode and calculate the **sum** of those numbers. You then divide the sum by **11** to verify the correctness of the barcode. This quotient value can be used to check the validity of the barcode to ensure that the system can correctly identify and process the product.

Input

In each case, the first line contains an **integer** k with **six** digits numbers representing the barcode of the goods. ($100000 \leq k \leq 999999$)

Output

Divide the sum of the 6 digits on k by 11, leaving two rounded decimal places in the answer.

Samples

Input1

```
123456
```

Output1

```
1.91
```

Explanation

$$123456 >> 123456 >> (1+2+3+4+5+6)/11 >> 1.909090... >> 1.91$$

Q3

Description

After the semester started, Qi(小七) felt anxious and eager to know when winter vacation would come.

The time span of a year on Kata Star is quite short, totaling approximately 256 days. The Kata Star people divide these 256 days into 5 months, represented as Month 1, Month 2, Month 3, Month 4 and
Month 5.

Among the 5 months, Month **3** has **52** days, while the other months have only **51** days.

Kata Star also differentiates between regular years and leap years. A regular year consists of **256** days, whereas a leap year consists of **257** days.

When the **sum** of the year and month is divisible by 7, the **month** becomes a **leap** month. The leap month is one day longer than the original month. For example, Month 1 of 2008 and Month 2 of 2020 are leap months. They had 52 and 53 days, respectively.

Due to Qi's limited calculation ability, please help him calculate how many days are left until winter vacation comes.

Input

Each test case occupies one line, consisting of 6 numbers represented as a string, indicating the current date and the start date of winter vacation.

Each date is given in the format `YEAR MONTH DAY`, where the first number represents the year, the second number represents the month, and the third number represents the day.

There is a
single space between each number. For example, `11206 3 32` represents the date 32nd, Month 3, 11206 in the Kata Star calendar.

Two dates are also separated by a space . For example, input `11206 3 32 11206 4 52` represents the current date as 32nd, Month 3, 11206, and the start date of winter vacation is 52st, Month 4, 11206.

We guarantee that all input dates for the test cases are in this format and are valid; thus, the second date **will not be earlier than** the first date, no validity checks need to be used.

We guarantee that the start and end dates are in the **same** year.

(1<=year<=50000)

Output

Output an integer , representing the number of days between the first date
and the second date.

Samples

Input1

```
2024 1 1 2024 5 41
```

output1

```
245
```

Explanation1

50(Month1)+51(Month2)+52(Month3)+51(Month4)
+41(Month5)=245
There is no leap month in 2024.

Input2

```
11206 1 32 11206 5 1
```

Output2

```
175
```

Explanation

20(Month1)+51(Month2)+52(Month3)+51(Month4)
+1(Month5)=175
The first month of 11026 is a leap month with 52 days.