Lab: Data Types and Variables

Problems for in-class lab for the Python Fundamentals Course @SoftUni. Submit your solutions in the SoftUni judge system at https://judge.softuni.bg/Contests/1721

1. Concat Names

Read two names and a delimiter. Print the names joined by the delimiter.

Examples

Input	Output
John Smith ->	John->Smith
Jan White <->	Jan<->White
Linda Terry =>	Linda=>Terry

Hints:

- Read the data:

```
first_name = input()
last_name = input()
delimiter = input()
```

- Print:

```
print(f'{first_name}{delimiter}{last_name}')
```

2. Centuries to Minutes

Write a program to enter an integer number of **centuries** and convert it to **years**, **days**, **hours** and **minutes**.

Examples

Input	Output
1	1 centuries = 100 years = 36524 days = 876576 hours = 52594560 minutes
5	5 centuries = 500 years = 182621 days = 4382904 hours = 262974240 minutes

Hints

- Assume that a year has 365.2422 days at average (the Tropical year).

3. Special Numbers

A number is **special** when the **sum of its digits is 5, 7 or 11**.

Write a program to read an integer **n** and for all numbers in the range **1…n**, print the number and if it is special or not (**True** / **False**).

Examples

Input	Output
15	1 -> False 2 -> False 3 -> False 4 -> False 5 -> True 6 -> False 7 -> True 8 -> False 9 -> False 10 -> False 11 -> False 12 -> False 13 -> False 14 -> True 15 -> False

Hints

- First read the data:

```
n = int(input())
```

- Iterate from 1 to **n** (we write **n+1**, because the for loop in Python iterates from 1 to **n-1** by default)

```
for num in range(1, n + 1):
    sum_of_digits = 0
    digits = num
```

- To calculate the sum of digits of given number **num**, you might repeat the following: sum the last digit (**num % 10**) and remove it (**sum = sum / 10**) until **num** reaches **0**.

```
while digits > 0:
    sum_of_digits += digits % 10
    digits = int(digits / 10)
```

- Finally print the result :

```
if (sum_of_digits == 5) or (sum_of_digits == 7) or (sum_of_digits == 11):
    print(f'{num} -> True')
else:
    print(f'{num} -> False')
```

4. Convert Meters to Kilometers

You will be given an integer that will be distance in meters. Write a program that converts meters to kilometers formatted to the second decimal point.

Examples

Input	Output

1852	1.85
798	0.80

Hints

- First we read the input number (which will be **int**)

```
meters = int(input())
```

- Then convert it to km

```
kilometers = meters/1000
```

- And finally print the number to the second decimal point

```
print(f'{kilometers:.2f}')
```

5. Pounds to Dollars

Write a program that converts British pounds to US dollars formatted to the 3th decimal point.

1 British Pound = 1.31 Dollars

Examples

Input	Output
80	104.800
39	51.090

Hints

- Read the pounds **(int)**

```
pounds = int(input())
```

- Convert them to dollars

```
dollars = pounds * 1.31
```

- Print

```
print(f'{dollars:.3f}')
```