Sample Test Cases

Test Case 1

Input

50

Output

100.00

Test Case 2

Input

300

Output

517.50

For example:

Input	Result
500	1035.00

Electricity Bill

Write a program to calculate and print the Electricity bill where the unit consumed by the user is given from test case. It prints the total amount the customer has to pay. The charge are as follows:

Unit   Charge / Unit

Upto 199   @1.20

200 and above but less than 400   @1.50

400 and above but less than 600   @1.80

600 and above   @2.00

If bill exceeds Rs.400 then a surcharge of 15% will be charged and the minimum bill should be of Rs.100/-

Program:

a=eval(input())

if(a>=100 and a<200):

   print("%.2f"%(a*1.20))

```python
elif(a>=200 and a<400):
    print("%.2f"%(a*1.50))
elif(a>=400 and a<600):
    b=a*1.80
    c=b*0.15
    print("%.2f"%(b+c))
elif(a>=600):
    b=a*2.00
    c=b*0.15
    print("%.2f"%(b+c))
else:
    print("%.2f"%(a*2.00))
```

Input Format:

Input consists of 2 integers.

 The first integer corresponds to the number of problems given and the second integer corresponds to the number of problems solved.

Output Format:

Output consists of the string "IN" or "OUT".

Sample Input and Output:

Input

8

3

Output

OUT

For example:

Input	Result
8 3	OUT

Ex. No.   :   3.4   Date:

Register No.:   230701353   Name: SURYA E

IN/OUT

Ms. Sita, the faculty handling programming lab for you is very strict. Your seniors have told you that she will not allow you to enter the week's lab if you have not completed atleast half the number of problems given last week. Many of you didn't understand this statement and so they requested the good programmers from your batch to write a program to find whether a student will be allowed into a week's lab given the number of problems given last week and the number of problems solved by the student in that week.

Program:

a=eval(input())

b=eval(input())

if(a/2<=b):

   print("IN")

else:

   print("OUT")

Sample Input 1

i

Sample Output 1

It's a vowel.

Sample Input 2

y

Sample Output 2

Sometimes it's a vowel... Sometimes it's a consonant.

Sample Input3

c

Sample Output 3

It's a consonant.

For example:

Input	Result
y	Sometimes it's a vowel... Sometimes it's a consonant.
u	It's a vowel.
p	It's a consonant.

Ex. No.   :   3.5   **Date:**

Register No.:   230701353   **Name: SURYA E**

Vowel or Consonant

In this exercise you will create a program that reads a letter of the alphabet from the user. If the user enters a, e, i, o or u then your program should display a message indicating that the entered letter is a vowel. If the user enters 'y' then your program should display a message indicating that sometimes y is a vowel, and sometimes y is a consonant. Otherwise your program should display a message indicating that the letter is a consonant.

Program:

a=input()

if(a=='a' or a=='e' or a=='i' or a=='o' or a=='u'):

   print("It's a vowel.")

elif(a=='y'):

   print("Sometimes it's a vowel... Sometimes it's a consonant.")

else:

   print("It's a consonant.")

Sample Input 1

1900

Sample Output 1

1900 is not a leap year.

Sample Input 2

2000

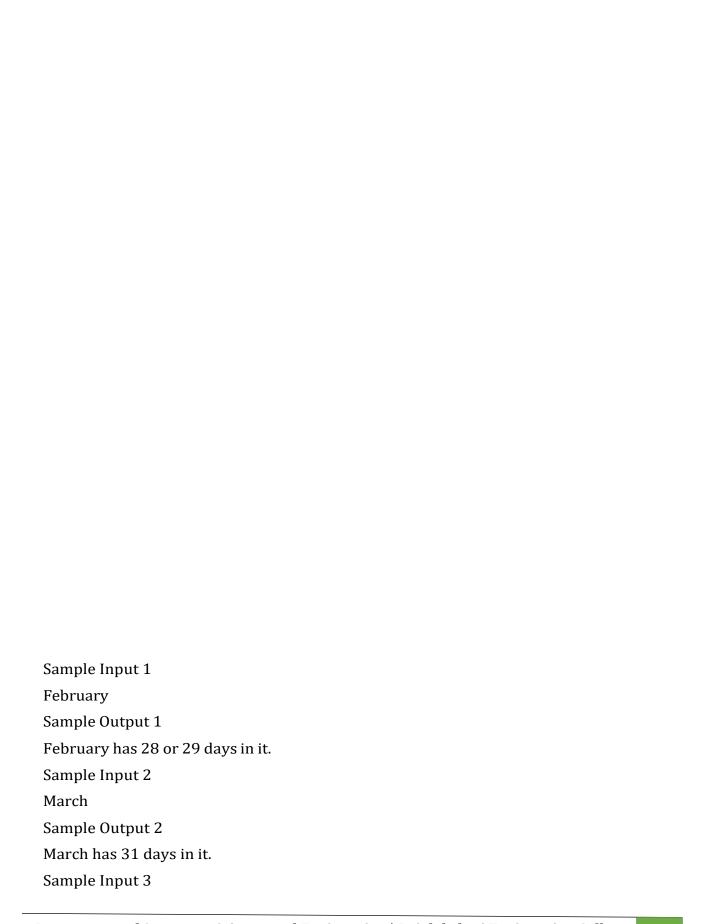Sample Output 2

2000 is a leap year.

Leap Year

Most years have 365 days. However, the time required for the Earth to orbit the Sun is actually slightly more than that. As a result, an extra day, February 29, is included in some years to correct for this difference. Such years are referred to as leap years. The rules for determining whether or not a year is a leap year follow:

• Any year that is divisible by 400 is a leap year.

• Of the remaining years, any year that is divisible by 100 is not a leap year.

• Of the remaining years, any year that is divisible by 4 is a leap year.

• All other years are not leap years.

Write a program that reads a year from the user and displays a message indicating whether or not it is a leap year.

Program:

```
a=eval(input())

if((a%400==0) and (a%4==0)):{

    print(a,"is a leap year.")

}

elif(a%100==0):{

    print(a,"is not a leap year.")

}

else:{

    print(a,"is not a leap year.")

}
```

Sample Input 1

February

Sample Output 1

February has 28 or 29 days in it.

Sample Input 2

March

Sample Output 2

March has 31 days in it.

Sample Input 3

April

Sample Output 3

April has 30 days in it.

For example:

Input	Result
February	February has 28 or 29 days in it.
March	March has 31 days in it.

Ex. No. : 3.7   **Date:**

Register No.: 230701353   **Name: SURYA E**

<u>Month name to days</u>

The length of a month varies from 28 to 31 days. In this exercise you will create a program that reads the name of a month from the user as a string. Then your program should display the number of days in that month. Display "28 or 29 days" for February so that leap years are addressed.

Program:

a=input()

if(a=='January' or a=='March' or a=='May' or a=='July' or a=='August' or a=='October' or a=='December'):{

   print(a,"has 31 days in it.")

}

elif(a=='February'):{

   print(a,"has 28 or 29 days in it.")

}

else:{

   print(a,"has 30 days in it.")

}

Sample Input

3

5

4

Sample Output

Yes

For example:

Input	Result
3 4 5	Yes

Pythagorean triple

Three numbers form a Pythagorean triple if the sum of squares of two numbers is equal to the square of the third.

For example, 3, 5 and 4 form a Pythagorean triple, since 3*3 + 4*4 = 25 = 5*5 You are given three integers, a, b, and c. They need not be given in increasing order. If they form a Pythagorean triple, then print "Yes", otherwise, print "No".

Program:

```
a=eval(input())

b=eval(input())

c=eval(input())

if((a*a)+(b*b)==(c*c) or (a*a)+(c*c)==(b*b) or (b*b)+(c*c)==(a*a)):{

    print("yes")

}

else:{

    print("no")

}
```

For example:

Input	Result
197	9

Second last digit

Write a program that returns the second last digit of the given number. Second last digit is being referred 10the digit in the tens place in the given number.

For example, if the given number is 197, the second last digit is 9.

Note1 - The second last digit should be returned as a positive number. i.e. if the given number is -197, the second last digit is 9.

Note2 - If the given number is a single digit number, then the second last digit does not exist. In such cases, the program should return -1. i.e. if the given number is 5, the second last digit should be returned as -1.

Program:

```
a=eval(input())
b=abs(a)
if(b%10==b):
    print("-1")
else:
    c=b/10
    d=int(c%10)
    print(d)
```