Started on	Monday, 19 August 2024, 1:37 PM
State	Finished
Completed on	Tuesday, 20 August 2024, 1:11 AM
Time taken	11 hours 34 mins
Marks	10.00/10.00
Grade	**100.00** out of 100.00

Write a program that reads an integer from the user. Then your program should display a message indicating whether the integer is even or odd.

Sample Input1:

5

Sample Output1:

5 is odd.

Sample Input2:

10

Sample Output2:

10 is even.

For example:

Input	Result
5	5 is odd.

Answer: (penalty regime: 0 %)

```
1  a=int(input());
2  if int(a%2)==0:
3      print(f"{a} is even.")
4  else:
5      print(f"{a} is odd.")
6
```

	Input	Expected	Got	
✔	5	5 is odd.	5 is odd.	✔
✔	10	10 is even.	10 is even.	✔
✔	20	20 is even.	20 is even.	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Write a program to find the eligibility of admission for a professional course based on the following criteria:

Marks in Maths >= 65

Marks in Physics >= 55

Marks in Chemistry >= 50

Or

Total in all three subjects >= 180

Sample Test Cases

Test Case 1

Input

70

60

80

Output

The candidate is eligible

Test Case 2

Input

50

80

80

Output

The candidate is eligible

Test Case 3

Input

50

60

40

Output

The candidate is not eligible

For example:

Input	Result
70 60 80	The candidate is eligible

Answer: (penalty regime: 0 %)

```
1  a=int(input())
2  b=int(input())
3  c=int(input())
4  tot=a+b+c
5  if tot>180 or (a>65 and b>55 and c>50):
6      print("The candidate is eligible")
7  else:
8      print("The candidate is not eligible")
9
```

	Input	Expected	Got	
✔	70 60 80	The candidate is eligible	The candidate is eligible	✔
✔	50 80 80	The candidate is eligible	The candidate is eligible	✔
✔	50 60 40	The candidate is not eligible	The candidate is not eligible	✔
✔	20 10 25	The candidate is not eligible	The candidate is not eligible	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

A triangle can be classified based on the lengths of its sides as equilateral, isosceles or scalene. All three sides of an equilateral triangle have the same length. An isosceles triangle has two sides that are the same length, and a third side that is a different length. If all of the sides have different lengths then the triangle is scalene.

Write a program that reads the lengths of the three sides of a triangle from the user. Then display a message that states the triangle's type.

Sample Input 1

60

60

60

Sample Output 1

That's a equilateral triangle

Sample Input 2

40

40

80

Sample Output 2

That's a isosceles triangle

Sample Input 3

50

60

70

Sample Output 3

That's a scalene triangle

For example:

Input	Result
60 60 60	That's a equilateral triangle
40 40 80	That's a isosceles triangle

Answer: (penalty regime: 0 %)

```
1  a=int(input())
2  b=int(input())
3  c=int(input())
4  if(a==b and b==c):
5      print("That's a equilateral triangle")
6  elif(a==b or b==c or c==a ):
7      print("That's a isosceles triangle")
8  else:
9      print("That's a scalene triangle")
```

	Input	Expected	Got	
✔	60 60 60	That's a equilateral triangle	That's a equilateral triangle	✔
✔	40 40 80	That's a isosceles triangle	That's a isosceles triangle	✔
✔	50 60 70	That's a scalene triangle	That's a scalene triangle	✔
✔	50 50 80	That's a isosceles triangle	That's a isosceles triangle	✔
✔	10 10 10	That's a equilateral triangle	That's a equilateral triangle	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

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.

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.
c	It's a consonant.

Answer: (penalty regime: 0 %)

```
1  a=str(input())
2  if(a=='a' or a=='e' or a=='i' or a=='o' or a=='u'):
3      print("It's a vowel.")
4  elif(a=='y'):
5      print("Sometimes it's a vowel... Sometimes it's a consonant.")
6  else:
7      print("It's a consonant.")
8
```

	Input	Expected	Got	
✔	i	It's a vowel.	It's a vowel.	✔
✔	y	Sometimes it's a vowel... Sometimes it's a consonant.	Sometimes it's a vowel... Sometimes it's a consonant.	✔
✔	c	It's a consonant.	It's a consonant.	✔

	Input	Expected	Got	
✔	e	It's a vowel.	It's a vowel.	✔
✔	r	It's a consonant.	It's a consonant.	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

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.

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.

Answer: (penalty regime: 0 %)

```
1  year=str(input())
2  if year=='January' or year=='March' or year=='May' or year=='July' or year=='August' or year=='October'
3      print(f"{year} has 31 days in it.")
4  elif year=='February':
5      print(f"{year} has 28 or 29 days in it.")
6  else:
7      print(f"{year} has 30 days in it.")
```

	Input	Expected	Got	
✔	February	February has 28 or 29 days in it.	February has 28 or 29 days in it.	✔
✔	March	March has 31 days in it.	March has 31 days in it.	✔
✔	April	April has 30 days in it.	April has 30 days in it.	✔
✔	May	May has 31 days in it.	May has 31 days in it.	✔

Passed all tests! ✔

Correct
Marks for this submission: 1.00/1.00.

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/-

Sample Test Cases

Test Case 1

Input

50

Output

100.00

Test Case 2

Input

300

Output

517.50

For example:

Input	Result
100.00	120.00

Answer: (penalty regime: 0 %)

```
1   a=float(input())
2   if a<200:
3       a=a*1.2
4   elif a>=200 and a<400:
5       a=a*1.5
6   elif a>=400 and a<600:
7       a=a*1.8
8   elif a>=600:
9       a=a*2.0
10  if a<100:
11      a=100
12      print("%.2f"%a)
13  elif a>400:
14      a=.15*a+a
15      print("%.2f"%a)
16  else:
17      print("%.2f"%a)
18
```

	Input	Expected	Got	
✔	50	100.00	100.00	✔
✔	100.00	120.00	120.00	✔
✔	500	1035.00	1035.00	✔
✔	700	1610.00	1610.00	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

In the 1800s, the battle of Troy was led by Hercules. He was a superstitious person. He believed that his crew can win the battle only if the total count of the weapons in hand is in multiple of 3 and the soldiers are in an even number of count. Given the total number of weapons and the soldier's count, Find whether the battle can be won or not according to Hercules's belief. If the battle can be won print True otherwise print False.

Input format:

Line 1 has the total number of weapons

Line 2 has the total number of Soldiers.

Output Format:

If the battle can be won print True otherwise print False.

Sample Input:

32

43

Sample Output:'

False

For example:

Input	Result
32 43	False

Answer: (penalty regime: 0 %)

```
1  a=int(input())
2  b=int(input())
3  if(int(a%3)==0 and int(b%2)==0):
4      print("True")
5  else:
6      print("False")
```

	Input	Expected	Got	
✔	32 43	False	False	✔
✔	273 7890	True	True	✔
✔	800 4590	False	False	✔

	Input	Expected	Got	
✔	6789 32996	True	True	✔

Passed all tests! ✔

Correct
Marks for this submission: 1.00/1.00.

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.

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

Answer: (penalty regime: 0 %)

```
1  tot=int(input())
2  num=int(input())
3  if(num>=tot/2):
4      print("IN")
5  else:
6      print("OUT")
```

	Input	Expected	Got	
✔	8 3	OUT	OUT	✔
✔	8 5	IN	IN	✔
✔	20 9	OUT	OUT	✔
✔	50 31	IN	IN	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Write a Python program that accepts three parameters. The first parameter is an integer. The second is one of the following mathematical operators: +, -, /, or *. The third parameter will also be an integer.

The function should perform a calculation and return the results. For example, if the function is passed 6 and 4, it should return 24.

Sample Input Format:

11

+

14

Sample Output Format:

25

Answer: (penalty regime: 0 %)

```
1  a=int(input())
2  s=str(input())
3  b=int(input())
4  if s=='+':
5      print(a+b)
6  elif s=='*':
7      print(a*b)
8  elif s=='-':
9      print(a-b)
10 elif s=='/':
11     print(a/b)
```

	Input	Expected	Got	
✔	11 + 14	25	25	✔
✔	45 - 50	-5	-5	✔
✔	12 * 100	1200	1200	✔
✔	18 / 2	9.0	9.0	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

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.

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.

Answer: (penalty regime: 0 %)

```
1  year=int(input())
2  if year%400==0:
3      if year%4==0:
4          print(f"{year} is a leap year.")
5      else:
6          print(f"{year} is not a leap year.")
7
8  else:
9      print(f"{year} is not a leap year.")
```

	Input	Expected	Got	
✔	1900	1900 is not a leap year.	1900 is not a leap year.	✔
✔	2000	2000 is a leap year.	2000 is a leap year.	✔
✔	2100	2100 is not a leap year.	2100 is not a leap year.	✔
✔	2400	2400 is a leap year.	2400 is a leap year.	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.