Started on	Tuesday, 5 March 2024, 7:14 PM
State	Finished
Completed on	Tuesday, 5 March 2024, 9:18 PM
Time taken	2 hours 3 mins
Marks	5.00/5.00
Grade	**50.00** out of 50.00 (**100**%)
Name	JEESHAN R J 2022-CSD-A

Question **1**

Correct

Mark 1.00 out of 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 %)

```
x=int(input())
y=input()
z=int(input())
if(y=='+'):
    print(x+z)
elif(y=='-'):
    print(x-z)
elif(y=='*'):
    print(x*z)
elif(y=='/'):
    print(x/z)
```

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

Question **2**

Correct

Mark 1.00 out of 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 %)

```
n=input()
if(n=='a' or n=='e' or n=='i' or n=='o' or n=='u'):
    print("It's a vowel.")
elif(n=='y'):
    print("Sometimes it's a vowel... Sometimes it's a consonant.")
else:
    print("It's a consonant.")
```

	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.	✔
✔	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.

Question **3**

Correct

Mark 1.00 out of 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 %)

```
n=input()
if(n=='January' or n=='March' or n=='May' or n=='July' or n=='August' or n=='(
    print("{} has 31 days in it.".format(n))
elif(n=='February'):
    print("{} has 28 or 29 days in it.".format(n))
else:
    print("{} has 30 days in it.".format(n))
```

	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.

Question **4**

Correct

Mark 1.00 out of 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 %)

```
n=float(input())
if(n<=99):
    print("%0.2f"%100)
elif(n>=100 and n<=199):
    x=n*1.20
    print("%0.2f"%x)
elif(n>=200 and n<=399):
    x=n*1.50
    if(x>400):
        c=x+(x*15/100)
        print("%0.2f"%c)
elif(n>=400 and n<=599):
    x=n*1.80
    if(x>400):
        c=x+(x*15/100)
        print("%0.2f"%c)
elif(n>=600):
    x=n*2.00
    if(x>400):
        c=x+(x*15/100)
        print("%0.2f"%c)
else:
    print("%0.2f"%n)
```

```
23        print("%0.2f"%n)
24
```

	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.

Question **5**

Correct

Mark 1.00 out of 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 %)

```
n=int(input())
if(n%400==0 and n%4==0):
    print("{} is a leap year.".format(n))
else:
    print("{} is not a leap year.".format(n))
```

	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.	✔