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**Started on** Wednesday, 6 March 2024, 11:35 AM

**State** Finished

**Completed on** Wednesday, 6 March 2024, 11:46 AM

**Time taken** 11 mins 15 secs

**Marks** 5.00/5.00

**Grade** **50.00** out of 50.00 (**100%**)

**Name** [DHANUSH M 2022-CSD-A](#)



## Question 1

Correct

Mark 1.00 out of 1.00

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 a%2==0:
3     print(a,"is even.")
4 else:
5     print(a,"is odd.")

```

	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.



## 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 Input 3

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 char1 = str(input())
2 if char1 == 'y':
3     print("Sometimes it's a vowel... Sometimes it's a consonant.")
4 elif char1 == 'a' or char1 == 'e' or char1 == 'i' or char1 == 'o' or char1 == 'u':
5     print("It's a vowel.")
6 else:
7     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

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 side1 = float(input())
2 side2 = float(input())
3 side3 = float(input())
4 if side1 == side2 == side3:
5     print("That's a equilateral triangle")
6 elif side1 == side2 or side1 == side3 or side2 == side3:
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.



## 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 %)

```

1 units=float(input())
2 sum=0
3 if int(units)<199:
4     sum+=units*1.20
5 elif units>=200 and units<400:
6     sum+=units*1.50
7
8 elif units>=400 and units<600:
9     sum+=units*1.80
10
11 elif units>=600:
12     sum+=units*2.00
13
14 if sum>400:
15     sum=sum+(sum*0.15)
16     print("{0:.2f}".format(float(sum)))
17
18 elif sum<100:
19     print("100.00")
20 else:
21     print("{0:.2f}".format(float(sum)))

```





	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

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	OUT
3	

**Answer:** (penalty regime: 0 %)

```
1 a=int(input())
2 b=int(input())
```



```
2 b=int(input())
3 if b<=a/2:
4     print("OUT")
5 else:
6     print("IN")
```

	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.

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