

**Started on** Tuesday, 5 March 2024, 9:03 AM

**State** Finished

**Completed on** Tuesday, 5 March 2024, 9:34 AM

**Time taken** 31 mins 3 secs

**Marks** 5.00/5.00

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

**Name** [ABINAUV R 2022-CSD-A](#)

## Question 1

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. extra day, February 29, is included in some years to correct for this difference. Such years are referred to as leap years. 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 x = int(input())
2 if((x%400==0)and(x%4==0)and(x%100==0)):
3     print("{} is a leap year.".format(x))
4 else:
5     print("{} is not a leap year.".format(x))
```

	Input	Expected	Got	
✓	1900	1900 is not a leap year.	1900 is not a leap year.	✓

Question **2**

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 a 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 is eligible to enter into a week's lab given the number of problems given last week and the number of problems solved by the student in the current 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 by the student in the current week.

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 a = int(input())
2 b = int(input())
3 if(b>=(a/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.

## Question 3

Correct

Mark 1.00 out of 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 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 count 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((a%3==0) and (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	✓
✓	6789 32996	True	True	✓

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 that reads an integer from the user. Then your program should display a message indicating whether 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 n = int(input())
2 if((n%2)!=0):
3     print("{} is odd.".format(n))
4 else:
5     print("{} is even.".format(n))
```

	Input	Expected	Got	
✓	5	5 is odd.	5 is odd.	✓
✓	10	10 is even.	10 is even.	✓

## Question 5

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 as a string. Then your program should display the number of days in that month. Display "28 or 29 days" for February. 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 x = input()
2 if(x=="April" or x=="June" or x=="September" or x=="November"):
3     print("{} has 30 days in it.".format(x))
4 elif(x=="February"):
5     print("{} has 28 or 29 days in it.".format(x))
6 else:
7     print("{} has 31 days in it.".format(x))
```



	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.

◀ [Week-03\\_MCQ](#)

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