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**State** Finished

**Completed on** Friday, 25 July 2025, 11:30 PM

**Time taken** 8 hours 20 mins

**Question 1** | Correct Marked out of 1.00

An online retailer sells two products: widgets and gizmos. Each widget weighs 75 grams. Each gizmo weighs 112 grams. Write a program that reads the number of widgets and the number of gizmos from the user. Then your program should compute and display the total weight of the parts.

Sample Input:

10

20

Sample Output:

The total weight of all these widgets and gizmos is 2990 grams.

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

```
1 x=int(input())
2 y=int(input())
3 print("The total weight of all these widgets and gizmos is %d grams."%((x*75)+(y*112)))
```

	<b>Input</b>	<b>Expected</b>	<b>Got</b>	
✓	10	The total weight of all these widgets and gizmos is 2990	The total weight of all these widgets and gizmos is 2990	✓
	20	grams.	grams.	

Passed all tests! ✓

**Question 2** | Correct Marked out of 1.00

Note:

Dont use if-else. Operators alone must be used .

A team from the Rotract club had planned to conduct a rally to create awareness among the Coimbatore people to donate blood. They conducted the rally successfully. Many of the Coimbatore people realized it and came forward to donate their blood to nearby blood banks. The eligibility criteria for donating blood are people should be above or equal to 18 and his/ her weight should be above 40. There was a huge crowd and staff in the blood bank found it difficult to manage the crowd. So they decided to keep a system and ask the people to enter their age and weight in the system. If a person is eligible he/she will be allowed inside.

Write a program and feed it to the system to find whether a person is eligible or not.

Input Format:

Input consists of two integers that correspond to the age and weight of a person respectively.

Output Format:

Display True(IF ELIGIBLE)

Display False (if not eligible)

Sample Input

19

45

Sample Output

True

**For example:**

Input	Result
18	False
40	

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

```
1 x=int(input())
2 y=int(input())
3 print(x>=18 and y>40)
```

	<b>Input</b>	<b>Expected</b>	<b>Got</b>	
✓	19 45	True	True	✓
✓	18 40	False	False	✓
✓	18 42	True	True	✓
✓	16 45	False	False	✓

Passed all tests! ✓

**Question 3** | Correct Marked 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 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	False
43	

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

```
1 x=int(input())
2 y=int(input())
3 print(x%3==0 and y%2==0)
```

	Input	Expected	Got	
✓	32 43	False	False	✓
✓	273 7890	True	True	✓

	Input	Expected	Got	
✓	800 4590	False	False	✓
✓	6789 32996	True	True	✓

Passed all tests! ✓

**Question 4** | Correct Marked out of 1.00

You went on a tour to Ooty with your friends. As a part of the tour, you went boating with them. For the boat to remain stable, the number of people on one boat is restricted based on the weight of the people. You find that the boatman who is sailing your boat is so much greedy of money. For earning more, he takes too many people to travel in the boat at a time. So you want to check how many people can travel in the boat at a time so that the boat will not drown. Calculate the weight by considering the number of adults and number of children. Assume that an adult weighs 75 kg and children weigh 30 kg each. If the weight is normal, display Boat is stable, else display Boat will drown.

**INPUT & OUTPUT FORMAT:**

Input consists of 3 integers.

First input corresponds to the weight that the boat can handle.

Second input corresponds to the number of adults.

Third input corresponds to the number of children.

**For example:**

Input	Result
340	Boat is stable
2	
3	
600	Boat will drown
7	
4	

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

```

1 x=int(input())
2 y=int(input())
3 z=int(input())
4 if(((y*75)+(z*30))<=x):
5     print("Boat is stable")
6 else:
7     print("Boat will drown")
8

```

	Input	Expected	Got	
✓	340 2 3	Boat is stable	Boat is stable	✓
✓	600 7 4	Boat will drown	Boat will drown	✓

Passed all tests! ✓

**Question 5** | Correct Marked out of 1.00

Complete the program to convert days into years, month and days. (Ignoring leap year and considering 1 month is 30 days)

Sample Test Cases

Test Case 1

Input

375

Output

YEARS: 1 MONTH: 0 DAYS: 10

Test Case 2

Input

200

Output

YEARS: 0 MONTH: 6 DAYS: 20

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

```
1 x=int(input())
2 y=x//365
3 z=x%365
4 a=z//30
5 b=z%30
6 print("YEARS: %d MONTH: %d DAYS: %d"%(y,a,b))
```

	Input	Expected	Got	
✓	375	YEARS: 1 MONTH: 0 DAYS: 10	YEARS: 1 MONTH: 0 DAYS: 10	✓

Passed all tests! ✓

**Question 6** | Correct Marked out of 1.00

Rohit wants to add the last digits of two given numbers.

For example,

If the given numbers are 267 and 154, the output should be 11.

Below is the explanation:

Last digit of the 267 is 7

Last digit of the 154 is 4

Sum of 7 and 4 = 11

Write a program to help Rohit achieve this for any given two numbers.

Note: Tile sign of the input numbers should be ignored.

i.e.

if the input numbers are 267 and 154, the sum of last two digits should be 11

if the input numbers are 267 and -154, the slim of last two digits should be 11

if the input numbers are -267 and 154, the sum of last two digits should be 11

if the input numbers are -267 and -154, the sum of last two digits should be 11

**For example:**

Input	Result
267	11
154	
267	11
-154	

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

```
1 x=int(input())
2 y=int(input())
3 print("%d%((abs(x)%10)+(abs(y)%10)))
```

	Input	Expected	Got	
✓	267	11	11	✓
	154			

	Input	Expected	Got	
✓	267 -154	11	11	✓

Passed all tests! ✓

**Question 7** | Correct Marked out of 1.00

Mr.Ram has been given a problem kindly help him to solve it. The input of the program is either 0 or 1. IF 0 is the input he should display "C" if 1 is the input it should display "D".There is a constraint that Mr. Ram should use either logical operators or arithmetic operators to solve the problem, not anything else.

Hint:

Use ASCII values of C and D.

**Input Format:**

An integer x,  $0 \leq x \leq 1$ .

**Output Format:**

output a single character "C" or "D"depending on the value of x.

**Input 1:**

0

**Output 1:**

C

**Input 2:**

1

**Output 1:**

D

**For example:**

Input	Result
0	C

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

```
1 a=int(input())
2 print(chr(67+a))
```

	<b>Input</b>	<b>Expected</b>	<b>Got</b>	
✓	0	C	C	✓
✓	1	D	D	✓

Passed all tests! ✓

**Question 8** | Correct Marked out of 1.00

Write a simple python program to find the square root of a given floating point number. The output should be displayed with 3 decimal places.

Sample Input:

8.00

Sample Output:

2.828

**For example:**

Input	Result
8.00	2.828
14.00	3.742

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

```
1 x=float(input())
2 print("%.3f"%(x**0.5))
```

	Input	Expected	Got	
✓	8.00	2.828	2.828	✓
✓	14.00	3.742	3.742	✓

Passed all tests! ✓

**Question 9** | Correct Marked out of 1.00

Write a python program that takes a integer between 0 and 15 as input and displays the number of '1' s in its binary form.(Hint:use python bitwise operator.

Sample Input

3

Sample Output:

2

Explanation:

The binary representation of 3 is 011, hence there are 2 ones in it. so the output is 2.

**For example:**

Input	Result
3	2

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

```

1 num=int(input())
2 a=int(num/2)
3 b=num%2
4 c=int(a/2)
5 d=a%2
6 e=int(c/2)
7 f=c%2
8 g=int(e/2)
9 h=e%2
10 sum=b+d+f+h
11 print(sum)

```

	Input	Expected	Got	
✓	3	2	2	✓
✓	5	2	2	✓
✓	15	4	4	✓

Passed all tests! ✓

**Question 10** | Correct Marked out of 1.00

Ramesh's basic salary is input through the keyboard. His dearness allowance is 40% of his basic salary, and his house rent allowance is 20% of his basic salary. Write a program to calculate his gross salary.

Sample Input:

10000

Sample Output:

16000

**For example:**

Input	Result
10000	16000

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

```

1 x=int(input())
2 a=x*(40/100)
3 b=x*(20/100)
4 print(int(x+a+b))

```

	Input	Expected	Got	
✓	10000	16000	16000	✓
✓	20000	32000	32000	✓
✓	28000	44800	44800	✓
✓	5000	8000	8000	✓

Passed all tests! ✓