

Started on Wednesday, 28 February 2024, 8:49 PM

State Finished

Completed on Thursday, 29 February 2024, 9:51 PM

Time taken 1 day 1 hour

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

Write a python program that takes a integer between 0 and 15 as input and displays the number of '1' s in its binary fo 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.

Answer: (penalty regime: 0 %)

```
1 n = int(input())
2 y = 0
3 while(n):
4     y += n&1
5     n>>=1
6 print(y)
7
```

	Input	Expected	Got	
✓	3	2	2	✓
✓	5	2	2	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question **2**

Correct

Mark 1.00 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.

For example:

Input	Result
10 20	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 {} grams.".format((x*75)+(y*112)))
```

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Question 3

Correct

Mark 1.00 out of 1.00

Pretend that you have just opened a new savings account that earns 4 percent interest per year. The interest that you earn at the end of the year, and is added to the balance of the savings account. Write a program that begins by reading the amount deposited into the account from the user. Then your program should compute and display the amount in the savings account at the end of 1, 2, and 3 years. Display each amount so that it is rounded to 2 decimal places.

Sample Input:

10000

Sample Output:

Balance as of end of Year 1: \$10400.00.

Balance as of end of Year 2: \$10816.00.

Balance as of end of Year 3: \$11248.64.

Answer: (penalty regime: 0 %)

```
1 x = int(input())
2 y = ((x/100)*4)+x
3 z = ((y/100)*4)+y
4 w = ((z/100)*4)+z
5 print("Balance as of end of Year 1: $%.2f."%y)
6 print("Balance as of end of Year 2: $%.2f."%z)
7 print("Balance as of end of Year 3: $%.2f."%w)
```

	Input	Expected	Got	
✓	10000	Balance as of end of Year 1: \$10400.00. Balance as of end of Year 2: \$10816.00. Balance as of end of Year 3: \$11248.64.	Balance as of end of Year 1: \$10400.00. Balance as of end of Year 2: \$10816.00. Balance as of end of Year 3: \$11248.64.	✓
✓	20000	Balance as of end of Year 1: \$20800.00. Balance as of end of Year 2: \$21632.00. Balance as of end of Year 3: \$22497.28.	Balance as of end of Year 1: \$20800.00. Balance as of end of Year 2: \$21632.00. Balance as of end of Year 3: \$22497.28.	✓

Passed all tests! ✓

Correct

Question 4

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

Answer: (penalty regime: 0 %)

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

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

Question **5**

Correct

Mark 1.00 out of 1.00

Mr. X's birthday is in next month. This time he is planning to invite N of his friends. He wants to distribute some chocolates after the party. He went to a shop to buy a packet of chocolates. At the chocolate shop, 4 packets are there with numbers of chocolates. He wants to buy such a packet which contains a number of chocolates, which can be distributed among all of his friends. Help Mr. X to buy such a packet.

Input Given:

N-No of friends

P1,P2,P3 AND P4-No of chocolates

OUTPUT:

"True" if he can buy that packet and "False" if he can't buy that packet.

SAMPLE INPUT AND OUTPUT:

5

25

12

10

9

OUTPUT

True False True False

Answer: (penalty regime: 0 %)

```
1 | n = int(input())
2 | p1 = int(input())
3 | p2 = int(input())
4 | p3 = int(input())
5 | p4 = int(input())
6 | print(p1%n==0,p2%n==0,p3%n==0,p4%n==0)
7 |
```

	Input	Expected	Got	
✓	5 25 23 20 10	True False True True	True False True True	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

[◀ Week-2_MCQ](#)

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