WEEK_02-Operators in Python

Started on	Wednesday, 28 February 2024, 7:26 PM
State	Finished
Completed on	Wednesday, 28 February 2024, 8:06 PM
Time taken	40 mins 38 secs
Marks	5.00/5.00
Grade	**50.00** out of 50.00 (**100**%)
Name	SAKTHI MAHESWARI C 2022-CSD-A

WEEK_02-Operators in Python

Question **1**

Correct

Mark 1.00 out of 1.00

Flag question

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.

Answer: (penalty regime: 0 %)

```
n=int(input())
c=0;
while(n>0):
    c=c+(n&1)
    n>>=1
print(c)
```

	Input	Expected	Got	
✔	3	2	2	✔
✔	5	2	2	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

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Question **2**

Correct

Mark 1.00 out of 1.00

Flag question

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 to all of his friends after the party. He went to a shop to buy a packet of chocolates. At the chocolate shop, 4 packets are there with different numbers of chocolates. He wants to buy such a packet which contains a number of chocolates, which can be distributed equally 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.

Answer: (penalty regime: 0 %)

```
n=int(input())
p1=int(input())
p2=int(input())
p3=int(input())
p4=int(input())
if(p1%n==0):
    print("True",end=" ")
else:
    print("False",end=" ")
if(p2%n==0):
    print("True",end=" ")
else:
    print("False",end=" ")
if(p3%n==0):
    print("True",end=" ")
else:
    print("False",end=" ")
if(p4%n==0):
    print("True",end=" ")
else:
    print("False",end=" ")
```

	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.

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Question **3**

Correct

Mark 1.00 out of 1.00

Flag question

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 %)

```
n1=int(input())
n2=int(input())
weight=(n1*75)+(n2*112)
print("The total weight of all these widgets and gizmos is",weight,"grams.")
```

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

Passed all tests! ✔

WEEK_02-Operators in Python

Question **4**

Correct

Mark 1.00 out of 1.00

Flag question

Pretend that you have just opened a new savings account that earns 4 percent interest per year. The interest that you earn is paid 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 of money deposited into the account from the user. Then your program should compute and display the amount in the savings account after 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 %)

```
n=int(input())
y1=n+(n*4)/100
y2=y1+(y1*4)/100
y3=y2+(y2*4)/100
print("Balance as of end of Year 1: ","%0.2f"%(y1),sep="$",end=".")
print()
print("Balance as of end of Year 2: ","%0.2f"%(y2),sep="$",end=".")
print()
print("Balance as of end of Year 3: ","%0.2f"%(y3),sep="$",end=".")

```

	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

Marks for this submission: 1.00/1.00.

WEEK_02-Operators in Python

Question **4**

Correct

Mark 1.00 out of 1.00

Flag question

Pretend that you have just opened a new savings account that earns 4 percent interest per year. The interest that you earn is paid 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 of money deposited into the account from the user. Then your program should compute and display the amount in the savings account after 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 %)

```
w=int(input())
s=int(input())
if(w%3==0):
    if(s%2==0):
        print("True")
else:
    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.