CS23336-Introduction to Python Programming

Started on	Friday, 9 August 2024, 12:21 PM
State	Finished
Completed on	Friday, 9 August 2024, 1:04 PM
Time taken	42 mins 39 secs
Marks	10.00/10.00
Grade	**100.00** out of 100.00

Question 1

Correct
Mark 1.00 out of 1.00
Flag question

Question text

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
267 154	11
267 -154	11

Answer:(penalty regime: 0 %)

```
a=int(input())
b=int(input())
a=abs(a)
b=abs(b)
print(a%10+b%10)
```

Feedback

Input	Expected	Got
267 154	11	11
267 -154	11	11

Passed all tests!

Correct
Marks for this submission: 1.00/1.00.

Question 2

Correct
Mark 1.00 out of 1.00
Flag question

Question text

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 %)

```
a=int(input())
b=int(input())
a=a*75
b=b*112
print("The total weight of all these widgets and gizmos is {} grams.".format(a+b))
```

Feedback

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
Flag question

Question text

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<=x<=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 %)

```
a=int(input())
b=67
if a==0 or a==1:
    b=b+a
    print(chr(b))
```

Feedback

Input	Expected	Got
0	C	C
1	D	D

Passed all tests!

Correct
Marks for this submission: 1.00/1.00.

Question 4

Correct
Mark 1.00 out of 1.00
Flag question

Question text

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 40	False

Answer:(penalty regime: 0 %)

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

print(a>=18 and b>40)
```

Feedback

Input	Expected	Got
19 45	True	True
18 40	False	False
18 42	True	True
16 45	False	False

Passed all tests!

Correct
Marks for this submission: 1.00/1.00.

Question 5

Correct
Mark 1.00 out of 1.00
Flag question

Question text

Write a program that returns the last digit of the given number. Last digit is being referred to the least significant digit i.e. the digit in the ones (units) place in the given number.

The last digit should be returned as a positive number.

For example,

if the given number is 197, the last digit is 7

if the given number is -197, the last digit is 7

For example:

Input	Result
197	7
-197	7

Answer:(penalty regime: 0 %)

```
a=int(input())
a=abs(a)
print(a%10)
```

Feedback

Input	Expected	Got
197	7	7
-197	7	7

Passed all tests!

Correct
Marks for this submission: 1.00/1.00.

Question 6

Correct
Mark 1.00 out of 1.00
Flag question

Question text

Write a program to find whether the given input number is Even.

If the given number is even, the function should return 2 else it should return 1.

Note: The number passed to the program can either be negative, positive or zero. Zero should be treated as Even.

For example:

Input	Result
100	2
1001	1

Answer:(penalty regime: 0 %)

```
a=int(input())
a=abs(a)
if(a%10==0):
    print("2")
else:
    print("1")
```

Feedback

Input	Expected	Got
100	2	2
1001	1	1
0	2	2

Passed all tests!

Correct
Marks for this submission: 1.00/1.00.

Question 7

Correct
Mark 1.00 out of 1.00
Flag question

Question text

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 %)

```
a=int(input())
b=a//365
a=a%365
c=a//30
a=a%30
print("YEARS: {} MONTH: {} DAYS: {}".format(b,c,a))
```

Feedback

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

Passed all tests!

Correct
Marks for this submission: 1.00/1.00.

Question 8

Correct
Mark 1.00 out of 1.00
Flag question

Question text

Write a program that returns the last digit of the given number. Last digit is being referred to the least significant digit i.e. the digit in the ones (units) place in the given number.

The last digit should be returned as a positive number.

For example,

if the given number is 197, the last digit is 7

if the given number is -197, the last digit is 7

For example:

Input	Result
197	7
-197	7

Answer:(penalty regime: 0 %)

```
a=int(input())
a=abs(a)
print(a%10)
```

Feedback

Input	Expected	Got
197	7	7
-197	7	7

Passed all tests!

Correct
Marks for this submission: 1.00/1.00.

Question 9

Correct
Mark 1.00 out of 1.00
Flag question

Question text

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 43	False

Answer:(penalty regime: 0 %)

```
a=int(input())
b=int(input())
print(a%3==0 and b%2==0)
```

Feedback

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 10

Correct
Mark 1.00 out of 1.00
Flag question

Question text

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 %)

```
a=int(input())
c=0
while(a!=0):
    b=a%2
    if(b==1):
        c+=1
    a=a//2
print(c)
```

Feedback

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

Passed all tests!

Correct
Marks for this submission: 1.00/1.00.