Solution QUIZ 6 (Dated: 05 Oct, 2022)
Object Oriented Programming (BSDS Spring 2022)

Roll No: _____ **Name: _____**

Q1. Consider the code and write output in the box (Code has some syntax errors, don't write related output, where code has errors). Also write reason of error in front of each line, where error exists? (Ignore logical errors)

```
1  class Funny:
2      f1 = 0
3      f2 = 10
4      def __init__(self, a, b):
5          self.__a = a
6          self.__b = 100 + Funny.f1
7          if Funny.f1 == 0:    Funny.f1 = 1
8          else:                Funny.f1 = 0
9          self.f2 = b
10     def __str__(self):
11         return f'a {self.__b} funny.f2 {self.f2}'
12     def __test(self):
13         print ('Tested')
14     def dont_test():
15         print('abc')
16         self.__test()
17     def test_this():
18         Funny(0,0).__test()
19
20 def main():
21     obj1 = Funny(5, 7)
22     obj2 = Funny(6, 8)
23     obj3 = Funny(8, 2)
24     print(obj1)
25     print(obj2)
26     print(obj3)
27     obj1.__test()
28     Funny.dont_test()
29     obj2.dont_test()
30     Funny.test_this()
```

```
a 100 funny.f2 7
a 101 funny.f2 8
a 100 funny.f2 2
abc
Tested
```

In line 16 class level member is accessing instance level member, which is illegal and has syntax error

In line 27 test is private function and can't be called outside the class. It is only available inside the class.

In line 29 instance is calling class level function, which is not allowed only we can call class level function using class names

Q2. Write a class "Wrong". Wrong has one private instance member **x** and one public instance member **y**. Class has two class level member's **m (2), n (5)**. Write following functions in your class: **[attempt this question on back side, divide page into two halves by a line to utilize space]**

- initialization function with two parameters, pass them to set function. Multiply m with 2 and n with 3
- set function, to set y (without check), check for x, if value is negative store 0, otherwise store the value
- string function to give instance members only with their labels (mean name of variables). Use tab character
- write private instance function to reset instance member's values to 0
- write class level member's getter functions

```
class Wrong:
    m = 2
    n = 5
    def __init__(self, x, y):
        self.set(x, y)
        Wrong.m *= 2
        Wrong.n *= 3
    def set(self, x, y):
        if x < 0:
            x = 0
        self.__x = x
        self.y = y
```

```
    def __str__(self):
        return f'X: {self.__x}\tY: {self.y}'

    def __reset(self):
        self.__x = 0
        self.y = 0

    def get_m():
        return Wrong.m

    def get_n():
        return Wrong.n
```

Q3. Create 3 objects of wrong class. Get their string representation concatenate them with comma separation. Write them in file "wrong.txt". Reopen file in read mode. Read data and break into individual record and print.

```
w1 = Wrong(-2, 3)
w2 = Wrong(2, 4)
w3 = Wrong(3, 7)


file = open('wrong.txt','w+')
file.write(f'{w1},{w2},{w3}')
file.close()
file = open('wrong.txt', 'r')
result = file.read().split(',')
for r in result:
    print(r)
```