

Started on	Friday, 30 May 2025, 11:27 AM
State	Finished
Completed on	Friday, 30 May 2025, 8:03 PM
Time taken	8 hours 35 mins
Overdue	6 hours 35 mins
Grade	80.00 out of 100.00

Question **1**

Correct

Mark 20.00 out
of 20.00

Write a Program in Python to Generate Fibonacci series for the number '5'

For example:

Input	Result
---	0
	1
	1
	2
	3

Answer: (penalty regime: 0 %)

```
1 a=0
2 b=1
3 c=0
4 print(a)
5 print(b)
6 for i in range(2,5):
7     c=a+b
8     print(c)
9     a=b
10    b=c
```

	Input	Expected	Got	
✓	---	0	0	✓
		1	1	
		1	1	
		2	2	
		3	3	

Passed all tests! ✓

Correct

Marks for this submission: 20.00/20.00.

Question **2**

Correct

Mark 20.00 out
of 20.00

Write a Python program for simply using the overloading operator for adding two objects.

class name : fruits

object name : apple, mango, a and b

For example:

Input	Result
100	apple and mango mixed: 300
200	fruit mix: bananaorange
banana	
orange	

Answer: (penalty regime: 0 %)

```

5         self.item = item
6
7     def __add__(self, other):
8
9         total_price = self.price + other.price
10        combined_items = self.item + other.item
11        return Accessories(total_price, combined_items)
12
13    def display_result(self):
14        print(f"apple and mango mixed: {self.price}")
15        print(f"fruit mix: {self.item}")
16
17    # Example usage:
18    a=int(input())
19    b=int(input())
20    c=input()
21    d=input()
22    obj1 = Accessories( a,c)
23    obj2 = Accessories(b,d)
24
25    result_obj = obj1 + obj2
26    result_obj.display_result()

```

	Input	Expected	Got	
✓	100 200 banana orange	apple and mango mixed: 300 fruit mix: bananaorange	apple and mango mixed: 300 fruit mix: bananaorange	✓

Passed all tests! ✓

Correct

Marks for this submission: 20.00/20.00.

Question **3**

Correct

Mark 20.00 out
of 20.00

Create a parent class **Fish** and define a class method **diet**, then create a child class called **Shark** while overriding the **diet** method so that objects instantiated from the **Shark** class use the overridden method.

For example:**Result**fish
shark**Answer:** (penalty regime: 0 %)

Reset answer

```
1 class Fish:
2     def diet(self):
3         print("fish")
4
5 class Shark:
6     def diet(self):
7         print("shark")
8
9 obj_fish=Fish()
10
11 obj_shark=Shark()
12 obj_fish.diet()
13 obj_shark.diet()
```

	Expected	Got	
✓	fish shark	fish shark	✓

Passed all tests! ✓

Correct

Marks for this submission: 20.00/20.00.

Question 4

Correct

Mark 20.00 out of 20.00

Create an abstract base class has a concrete method sleep() that will be the same for all the child classes. So, we do not define it as an abstract method, thus saving us from code repetition. On the other hand, the sounds that animals make are all different. For that purpose, define the sound() method as an abstract method. then implement it in all child classes.

For example:

Result

```
I am going to sleep in a while  
I can meow  
I can hiss
```

Answer: (penalty regime: 0 %)

Reset answer

```
1 from abc import ABC,abstractmethod  
2  
3 class Animal(ABC):  
4  
5     #concrete method  
6     def sleep(self):  
7         print("I am going to sleep in a while")  
8  
9     @abstractmethod  
10    def sound(self):  
11        print("This function is for defining the sound by any animal")  
12        pass  
13  
14 class Snake(Animal):  
15     def sound(self):  
16         print("I can hiss")  
17  
18 class Dog(Animal):  
19     def sound(self):  
20         print("I can bark")  
21  
22 class Lion(Animal):
```


	Expected	Got	
✓	I am going to sleep in a while I can meow I can hiss	I am going to sleep in a while I can meow I can hiss	✓

Passed all tests! ✓

Correct

Marks for this submission: 20.00/20.00.

Question 5

Not answered

Mark 0.00 out of
20.00

Create `Counter` class which has one attribute called `current` which defaults to zero. And it has three methods:

- `increment()` increases the value of the `current` attribute by one.
- `value()` returns the current value of the `current` attribute
- `reset()` sets the value of the `current` attribute to zero

create a new instance of the `Counter` class and calls the `increment()` method three times before showing the current value of the counter to the screen

For example:

Result

3

Answer: (penalty regime: 0 %)

Reset answer

```
1 class Counter:
2     def __init__(self):
3         self.current = 0
4
5     def increment(self):
6         self.current += 1
7
8     def value(self):
9         return self.current
10
11    def reset(self):
12        self.current = 0
13
14    counter = Counter()
15
16
17    #call the increment method three times
18
19    print(counter.value())
```

