

**Started on** Thursday, 22 August 2024, 3:29 PM

**State** Finished

**Completed on** Thursday, 22 August 2024, 4:04 PM

**Time taken** 34 mins 59 secs

**Grade** 80.00 out of 100.00

Question **1**

Correct

Mark 20.00 out of 20.00

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

**For example:**

Input	Result
23	: 44
21	: helloworld
hello	
world	

**Answer:** (penalty regime: 0 %)

```
1 class example:
2     def __init__(self,x):
3         self.x=x
4     def __add__(self,u):
5         return self.x+u.x
6 object_1=example(int(input()))
7 object_2=example(int(input()))
8 print(" ",object_1+object_2)
9 object_3=example(str(input()))
10 object_4=example(str(input()))
11 print(" ",object_3+object_4)
12
13
```

	Input	Expected	Got	
✓	23	: 44	: 44	✓
	21	: helloworld	: helloworld	
	hello			
	world			

Passed all tests! ✓

**Correct**

Marks for this submission: 20.00/20.00.

Question **2**

Correct

Mark 20.00 out of 20.00

Define the abstract base class named Polygon and also define the abstract method. This base class inherited by the various subclasses. Implement the abstract method in each subclass. Create the object of the subclasses and invoke the **sides()** method.

**For example:**

**Result**

Triangle has 3 sides  
I have 4 sides  
Pentagon has 5 sides  
Hexagon has 6 sides

**Answer:** (penalty regime: 0 %)

Reset answer

```
1 from abc import ABC
2
3 class Polygon(ABC):
4
5     # abstract method
6     def sides(self):
7         pass
8
9 class Triangle(Polygon):
10
11
12     def sides(self):
13         print("Triangle has 3 sides")
14
15 class Pentagon(Polygon):
16
17
18     def sides(self):
19         print("Pentagon has 5 sides")
20
21 class Hexagon(Polygon):
22     def sides(self):
```

	Expected	Got	
✓	Triangle has 3 sides I have 4 sides Pentagon has 5 sides Hexagon has 6 sides	Triangle has 3 sides I have 4 sides Pentagon has 5 sides Hexagon has 6 sides	✓

Passed all tests! ✓

**Correct**

Marks for this submission: 20.00/20.00.

## Question 3

Correct

Mark 20.00 out of 20.00

Create two new, independent classes: `Turtle` and `Frog`. When you instantiate an object from the `Turtle` class, the object will use the `type` method as it is defined in that class. The same will be true of objects instantiated from the `Frog` class, despite the fact that the methods have the same name.

**For example:****Result**

```
turtle
frog
```

**Answer:** (penalty regime: 0 %)

Reset answer

```
1 class Turtle:
2     def type(self):
3         print("turtle")
4
5 class Frog:
6     def type(self):
7         print("frog")
8 obj_sea_turtle=Turtle()
9 obj_treefrog=Frog()
10
11 obj_sea_turtle.type()
12 obj_treefrog.type()
```

	Expected	Got	
✓	turtle frog	turtle frog	✓

Passed all tests! ✓

**Correct**

Marks for this submission: 20.00/20.00.

## Question 4

Incorrect

Mark 0.00 out of 20.00

Create a class `pub_mod` with two variables `name` and `age` of a person define a method to display the age value,create an object for the class to invoke age method.

**For example:****Result**

Name: Jason

Age: 35

**Answer:** (penalty regime: 0 %)

Reset answer

```
1 # illustrating public members & public access modifier
2 class pub_mod:
3     # constructor
4     def __init__(self, name, age):
5         self.name = name;
6         self.age = age;
7
8     def Age(self):
9         # accessing public data member
10
11 # creating object with values jason,35
12
13 # accessing public data member
14 print("Name: ", obj.name)
15 # calling public member function of the class
16 obj.Age()
17
```

	Expected	Got	
✖	Name: Jason Age: 35	***Run error*** Traceback (most recent call last): File "__tester__.python3", line 14, in <module> print("Name: ", obj.name) NameError: name 'obj' is not defined	✖

Your code must pass all tests to earn any marks. Try again.

Show differences

**Incorrect**

Marks for this submission: 0.00/20.00.

## Question 5

Correct

Mark 20.00 out of 20.00

Write a python code to create a Employee class with the parameterized constructors with the parameters as id and name, print the details of the Employee using def display(self) method.

For example:

Input	Result
1 nithin	Hello my id is : 1 My name is : nithin

Answer: (penalty regime: 0 %)

```

1 class Employee:
2     def __init__(self, id, name):
3         self.id=id
4         self.name=name
5     def display(self):
6         print("Hello my id is :",self.id)
7         print("My name is :",self.name)
8
9 id=int(input())
10 name=input()
11 a=Employee(id,name)
12 a.display()
```

	Input	Expected	Got	
✓	1 nithin	Hello my id is : 1 My name is : nithin	Hello my id is : 1 My name is : nithin	✓
✓	110 saveetha	Hello my id is : 110 My name is : saveetha	Hello my id is : 110 My name is : saveetha	✓

Passed all tests! ✓

Correct

Marks for this submission: 20.00/20.00.