

Started on	Monday, 21 October 2024, 3:08 PM
State	Finished
Completed on	Monday, 21 October 2024, 3:44 PM
Time taken	35 mins 55 secs
Grade	80.00 out of 100.00

Question 1

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     def sides(self):
12         print("Triangle has 3 sides")
13
14 class Pentagon(Polygon):
15     def sides(self):
16         print("Pentagon has 5 sides")
17 class Hexagon(Polygon):
18     def sides(self):
19         print("Hexagon has 6 sides")
20 class square(Polygon):
21     def sides(self):
22         print("I have 4 sides")

```

	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 2

Correct

Mark 20.00 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         print("Age: ",self.age)
10 obj=pub_mod("Jason",35)
11 print("Name: ",obj.name)
12 obj.Age()
13
```

	Expected	Got	
✓	Name: Jason Age: 35	Name: Jason Age: 35	✓

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 **type**, then create a child class called **Shark** while overriding the **type** 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 type(self):
3         print("fish")
4
5 class Shark(Fish):
6     def type(self):
7         print("shark")
8
9 obj_goldfish=Fish()
10 obj_hammerhead=Shark()
11 obj_goldfish.type()
12 obj_hammerhead.type()
```

	Expected	Got	
✓	fish shark	fish shark	✓

Passed all tests! ✓

Correct

Marks for this submission: 20.00/20.00.

Question 4

Incorrect

Mark 0.00 out of 20.00

Write a Python program to count the number of strings where the string length is 2 or more and the first and last character are same from a given list of strings.

Sample List : ['abc', 'xyz', 'aba', '1221']

Expected Result : 2

Answer: (penalty regime: 0 %)

```
1 list=['abc','xyz','aba','1221']  
2
```

	Expected
✖	2

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

Incorrect

Marks for this submission: 0.00/20.00.

Question 5

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
10	adding integers : 30
20 can teen	adding strings : canteen

Answer: (penalty regime: 0 %)

```

1 class integers:
2     def __init__(self,a):
3         self.a=a
4     def add(self,b):
5         return self.a+self.b
6 a=int(input())
7 b=int(input())
8 c=input()
9 d=input()
10 o1=integers(a)
11 o2=integers(b)
12 o3=integers(c)
13 o4=integers(d)
14 print("adding integers :", a+b)
15 print("adding strings :", c+d)

```

	Input	Expected	Got	
✓	10 20 can teen	adding integers : 30 adding strings : canteen	adding integers : 30 adding strings : canteen	✓
✓	20 30 sky walk	adding integers : 50 adding strings : skywalk	adding integers : 50 adding strings : skywalk	✓

Passed all tests! ✓

Correct

Marks for this submission: 20.00/20.00.