Started on	Thursday, 18 September 2025, 9:14 AM
State	Finished
Completed on	Thursday, 18 September 2025, 9:40 AM
Time taken	25 mins 36 secs
Grade	**100.00** out of 100.00

Question **1**

Correct

Mark 20.00 out of 20.00

import the **abc module** to create the abstract base class. Create the Car class that inherit the ABC class and define an abstract method named mileage(). then inherit the base class from the three different subclasses and implement the abstract method differently. Create the objects to call the abstract method.

For example:

Result
The mileage is 30kmph The mileage is 27kmph The mileage is 25kmph The mileage is 24kmph

Answer: (penalty regime: 0 %)

Reset answer

```
from abc import ABC, abstractmethod
class Car(ABC):
    def mileage(self):
        pass
class Tesla(Car):
    def mileage(self):
        print("The mileage is 30kmph")
class Suzuki(Car):
    def mileage(self):
        print("The mileage is 27kmph ")
class Duster(Car):
     def mileage(self):
          print("The mileage is 25kmph ")

class Renault(Car):
    def mileage(self):
            print("The mileage is 24kmph ")


a=Tesla()
b=Suzuki()
c=Duster()
```

	Expected	Got	
✔	The mileage is 30kmph The mileage is 27kmph The mileage is 25kmph The mileage is 24kmph	The mileage is 30kmph The mileage is 27kmph The mileage is 25kmph The mileage is 24kmph	✔

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 : accessories

For example:

Input	Result
69 68 APPLE LAPTOP	Rate is : 137 accessories are: APPLELAPTOP

Answer: (penalty regime: 0 %)

```
class accessories:
    def __init__(self,a):
        self.a=a
    def __add__(self,other):
        return(self.a+other.a)
a=int(input())
b=int(input())
c=input()
d=input()
print(f"Rate is : {a+b}")
print(f"accessories are:  {c+d}")
```

	Input	Expected	Got	
✔	69 68 APPLE LAPTOP	Rate is : 137 accessories are: APPLELAPTOP	Rate is : 137 accessories are: APPLELAPTOP	✔

Passed all tests! ✔

Correct

Marks for this submission: 20.00/20.00.

Question **3**

Correct

Mark 20.00 out of 20.00

Create a class student with members name ,age,rollno and an user defined function show() to display the details of the student ,use the getter and setter method Information Hiding and conditional logic for setting an object attributes

For example:

Result
Student Details: Jessa 10 Invalid roll no. Please set correct roll number Student Details: Jessa 25

Answer: (penalty regime: 0 %)

Reset answer

```
class Student:
    def __init__(self, name, roll_no, age):
        self.name = name
        self.roll_no = roll_no
        self.age = age
    def show(self):
        print('Student Details:', self.name, self.roll_no)
    def set_roll_no(self):
        if self.roll_no < 50:
            print('Invalid roll no. Please set correct roll number')
        else:
            print(self.roll_no)
    def age_student(self):
        print('Student Details:',self.name, self.age)
jessa = Student('Jessa', 10, 25)
jessa.show()
jessa.set_roll_no()
jessa.age_student()
```

	Expected	Got	
✔	Student Details: Jessa 10 Invalid roll no. Please set correct roll number Student Details: Jessa 25	Student Details: Jessa 10 Invalid roll no. Please set correct roll number Student Details: Jessa 25	✔

Passed all tests! ✔

Correct

Marks for this submission: 20.00/20.00.

Question **4**

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

```
class Fish:
    def type(self):
        print("fish")

class Shark(Fish):
    def type(self):
        print("shark")

obj_goldfish=Fish()
obj_hammerhead=Shark()
obj_goldfish.type()
obj_hammerhead.type()

```

	Expected	Got	
✔	fish shark	fish shark	✔

Passed all tests! ✔

Correct

Marks for this submission: 20.00/20.00.

Question **5**

Correct

Mark 20.00 out of 20.00

Write a Python program to multiply all the items in a list [1,2,-8].

Answer: (penalty regime: 0 %)

```
list=[1,2,-8]
mult=1
for i in list:
    mult*=i
print(mult)
```

	Expected	Got	
✔	-16	-16	✔

Passed all tests! ✔

Correct

Marks for this submission: 20.00/20.00.