

Assessment Day - 4

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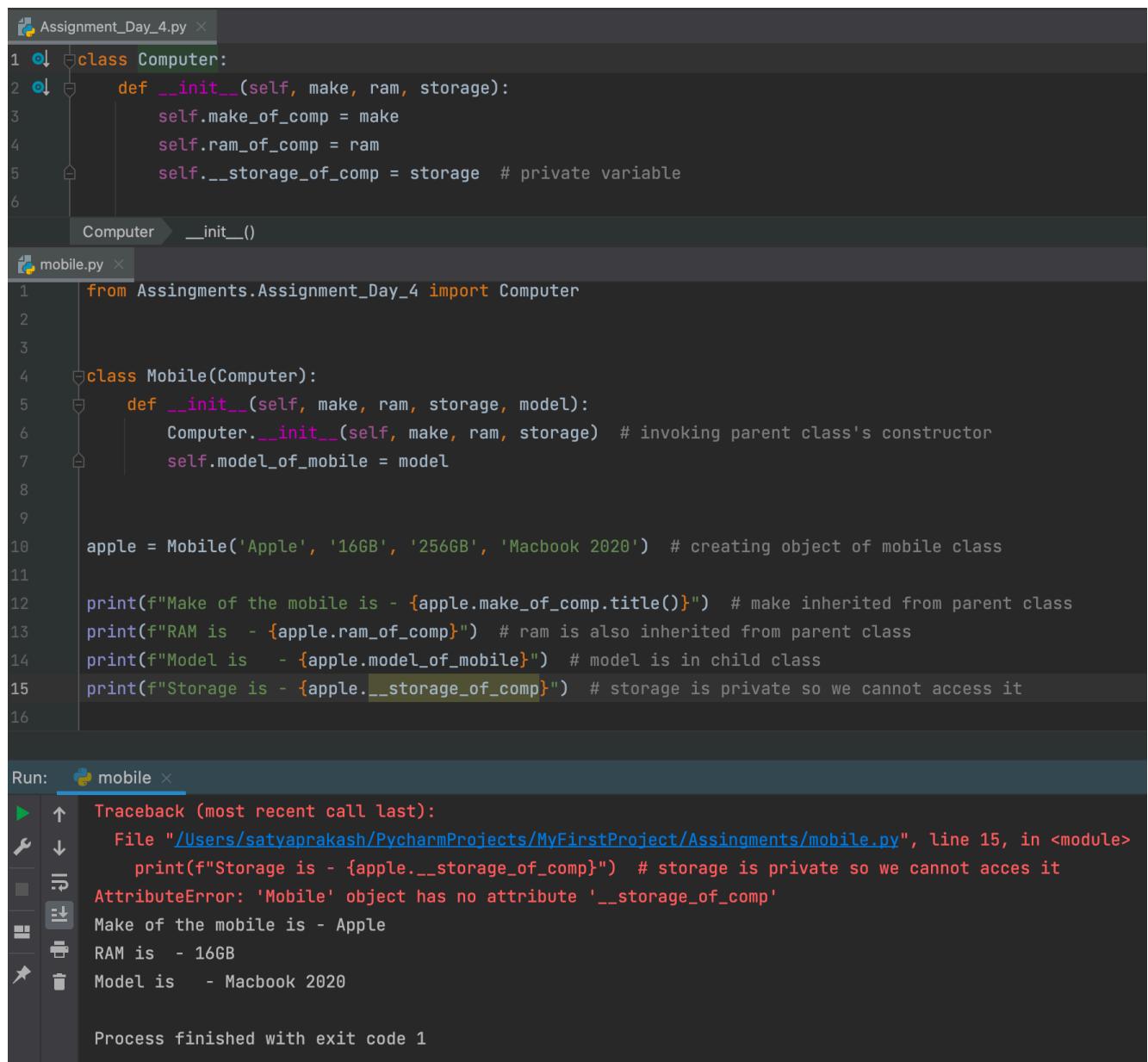
DATE - 20 JAN 2022

Q1) Create a class Computer. Define a constructor in it which 3 input parameters – ‘make’, ‘ram’ and ‘storage’. Make ‘storage’ private.

Create another class Mobile which is child of Computer. Define a constructor in it which takes 4 input parameters ‘make’, ‘ram’, ‘storage’, ‘model’. Call the constructor of parent class from within the child class’s constructor.

Create an object ‘apple’ of Mobile class and then print all the properties associated with the ‘apple’ object. What output do you get?

PRIVATE :



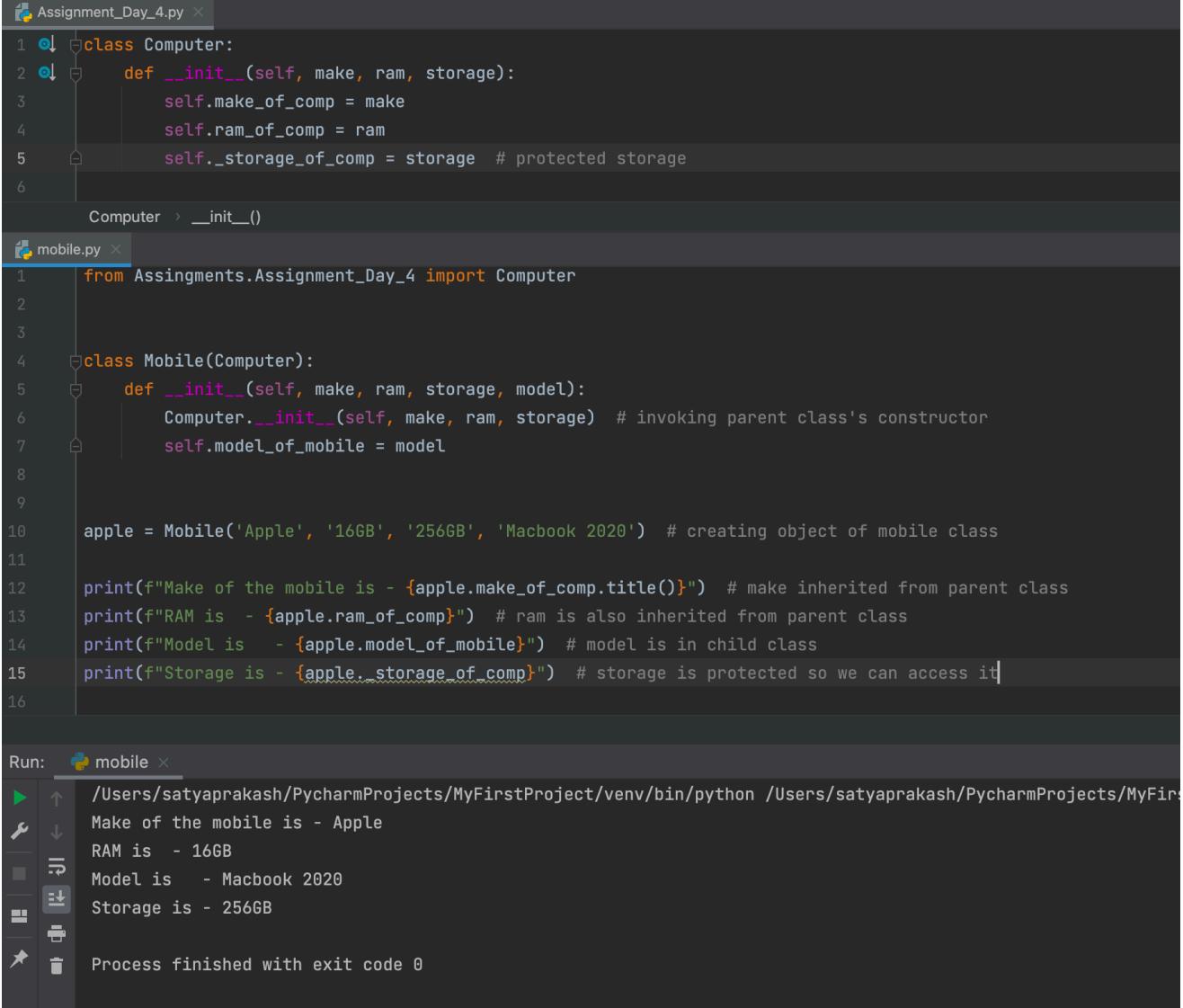
```
Assignment_Day_4.py
1 class Computer:
2     def __init__(self, make, ram, storage):
3         self.make_of_comp = make
4         self.ram_of_comp = ram
5         self.__storage_of_comp = storage # private variable
6
7 Computer __init__()

mobile.py
1 from Assingments.Assignment_Day_4 import Computer
2
3
4 class Mobile(Computer):
5     def __init__(self, make, ram, storage, model):
6         Computer.__init__(self, make, ram, storage) # invoking parent class's constructor
7         self.model_of_mobile = model
8
9
10 apple = Mobile('Apple', '16GB', '256GB', 'Macbook 2020') # creating object of mobile class
11
12 print(f"Make of the mobile is - {apple.make_of_comp.title()}") # make inherited from parent class
13 print(f"RAM is - {apple.ram_of_comp}") # ram is also inherited from parent class
14 print(f"Model is - {apple.model_of_mobile}") # model is in child class
15 print(f"Storage is - {apple.__storage_of_comp}") # storage is private so we cannot access it

Run: mobile
1 Traceback (most recent call last):
2   File "/Users/satyaprakash/PycharmProjects/MyFirstProject/Assingments/mobile.py", line 15, in <module>
3       print(f"Storage is - {apple.__storage_of_comp}") # storage is private so we cannot acces it
4   AttributeError: 'Mobile' object has no attribute '__storage_of_comp'
5
6 Make of the mobile is - Apple
7 RAM is - 16GB
8 Model is - Macbook 2020
9
10 Process finished with exit code 1
```

Q2) Keep everything same as in previous question, change 'storage' to protected. Now send a screenshot of the output you get.

PROTECTED :



```
Assignment_Day_4.py
1  class Computer:
2      def __init__(self, make, ram, storage):
3          self.make_of_comp = make
4          self.ram_of_comp = ram
5          self._storage_of_comp = storage # protected storage
6
7      Computer > __init__()

mobile.py
1  from Assingments.Assignment_Day_4 import Computer
2
3
4  class Mobile(Computer):
5      def __init__(self, make, ram, storage, model):
6          Computer.__init__(self, make, ram, storage) # invoking parent class's constructor
7          self.model_of_mobile = model
8
9
10 apple = Mobile('Apple', '16GB', '256GB', 'Macbook 2020') # creating object of mobile class
11
12 print(f"Make of the mobile is - {apple.make_of_comp.title()}") # make inherited from parent class
13 print(f"RAM is - {apple.ram_of_comp}") # ram is also inherited from parent class
14 print(f"Model is - {apple.model_of_mobile}") # model is in child class
15 print(f"Storage is - {apple._storage_of_comp}") # storage is protected so we can access it

Run: mobile
/Users/satyaprakash/PycharmProjects/MyFirstProject/venv/bin/python /Users/satyaprakash/PycharmProjects/MyFirstProject/mobile.py
Make of the mobile is - Apple
RAM is - 16GB
Model is - Macbook 2020
Storage is - 256GB
Process finished with exit code 0
```