oopsassignment

Use the "Run" button to execute the code.

```
!pip install jovian --upgrade --quiet
```

```
import jovian
```

```
# Execute this to save new versions of the notebook
jovian.commit(project="oopsassignment")
```

Write a Rectangle class in Python language, allowing you to build a rectangle with length and width attributes.Create a Perimeter() method to calculate the perimeter of the rectangle and a Area() method to calculate the area of the rectangle.Create a method display() that display the length, width, perimeter and area of an object created using an instantiation on rectangle class.Create a Parallelepipede child class inheriting from the Rectangle class and with a height attribute and another Volume() method to calculate the volume of the Parallelepiped

```
class Rectangle:
    def __init__(self):
        self.length=float(input("length is:"))
        self.width=float(input("width is:"))
    def Perimeter(self):
        peri_rec=2*(self.length + self.width)
        return peri_rec
    def Area(self):
        area_rec=(self.length + self.width)
        return area_rec
    def Display(self):
        print("length is:",self.length,"width is:",self.width,"Rectangel perimeter is:"
class Parallelepipede(Rectangle):
    def __init__(self):
        self.height=float(input("Heigth is:"))
        Rectangle.__init__(self)
    def Volume(self):
        vol_rec=self.length*self.width*self.height
        return vol_rec


R=Parallelepipede()
R.Display()
print("Volume of parallelepipede is",R.Volume())
```

```
Heigth is:10
length is:20
width is:30
```

```
length is: 20.0 width is: 30.0 Rectangel perimeter is: 100.0 Rectangle area is: 50.0
Volume of parallelepipede is 6000.0
```

```
class Rectangle:
    def __init__(self,length,width):
        self.length=length
        self.width=width
    def Perimeter(self):
        peri_rec=2*(self.length + self.width)
        return peri_rec
    def Area(self):
        area_rec=(self.length + self.width)
        return area_rec
    def Display(self):
        print("length is:",self.length,"width is:",self.width,"Rectangel perimeter is:"
class Parallelepipede(Rectangle):
    def __init__(self,height,length,width):
        self.height=height
        Rectangle.__init__(self,length,width)
    def Volume(self):
        vol_rec=self.length*self.width*self.height
        return vol_rec


R=Parallelepipede(20,20,10)
R.Display()
R.Volume()
```

```
length is: 20 width is: 10 Rectangel perimeter is: 60 Rectangle area is: 30
4000
```

Create a Python class Person with attributes: name and age of type string.Create a display() method that displays the name and age of an object created via the Person class.Create a child class Student which inherits from the Person class and which also has a section attribute.Create a method displayStudent() that displays the name, age and section of an object created via the Student class.Create a student object via an instantiation on the Student class and then test the displayStudent method.

```
class Person:
    def __init__(self):
        self.name=input("enter name:")
        self.age=str(input("enter age:"))
    def Display(self):
        print("Person name is:",self.name,"Person age is:",str(self.age))
class Student(Person):
    def __init__(self):
```

```
        self.section=input("section:")
        Person.__init__(self)
    def displayStudent(self):
        return self.name+" "+str(self.age)+" "+self.section


p=Person()
p.Display()
s=Student()
s.displayStudent()
```

```
enter name:df
enter age:vdv
Person name is: df Person age is: vdv
section:dg
enter name:fg
enter age:fd
'fg fd dg'
```