

QUESTION 1

- Write a Python class named Book with private attributes for title, author, and price. Include accessor and mutator methods for each attribute. Create a subclass Novel that inherits from the book class, the Novel Class has the property *category*. *Create an object of the Novel class and display all its properties.*

SOLUTION

```
class Book:
```

```
    def __init__(self,title,author,price):
```

```
        self.title=title
```

```
        self.author=author
```

```
        self.price=price
```

```
    def get_title(self):
```

```
        return self.title
```

```
    def get_author(self):
```

```
        return self.author
```

```
    def get_price(self):
```

```
        return self.price
```

```
    def set_title(self,titl):
```

```
        self.title=titl
```

```
    def set_author(self,autho):
```

```
        self.author=autho
```

```
def set_price(self,price):
    self.price=price

class Novel(Book):

    def __init__(self, category):
        self.category=category

    def get_category(self):
        return self.category

novel1=Novel('Fiction')
novel1.set_author('Jet Lee')
novel1.set_title('JAVA IN A TEA CUP')
novel1.set_price(450)

print('author:', novel1.get_author())
print('Title:', novel1.get_title())
print('Price:', novel1.get_price())
print('Category:', novel1.get_category())
```

QUESTION 2

- Write a Python program that demonstrates method overriding using a Shape superclass and two subclasses: Rectangle and Circle. Each subclass should have its own area() method.