

**Task : 1**

Create a Python program to model a library system:

1. Implement a parent class called Item with attributes title and author, and a method display\_info to display the title and author of the item.
2. Then create two child classes Book and Magazine inheriting from Item, each with an additional attribute (pages for Book and issue\_number for Magazine) and a method additional\_info to display the additional attributes.

**Answer:**

```
class Item():  
    def __init__(self , title , author):  
        self.title = title  
        self.author = author  
    def display_info(self):  
        print(f" Title : {self.title}")  
        print(f" Author :{self.author}")
```

```
class Book(Item):
```

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

```
        super().__init__(title , author)
```

```
        self.pages = pages
```

```
    def display_info(self):
```

```
        super().display_info()
```

```
        print(f" Pages : {self.pages}")
```

```
class Magazine(Item):
```

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

```
        super().__init__(title , author)
```

```
        self.issue_number = issue_number
```

```
    def display_info(self):
```

```
        super().display_info()
```

```
        print(f" Issue_number : {self.issue_number}" )
```

```
obj_1 = Book( " Baal-e-Jibreel " , " Allama-Muhammad-Iqbal " , "1935")
```

```
obj_1.display_info()
```

```
obj_2 =Magazine( " Peer-e-Kamil" , " Umera-Ahmad " , "141753")
```

```
obj_2.display_info()
```