**Name: Usman Ul haq**

**Roll number: SU92-BSAIM-S24-035**

**Section: 2A**

**Semester: 2nd**

**Task = 05**

**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.**

class Publication:

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 Novel(Publication):

def \_\_init\_\_(self, title, author, pages):

super().\_\_init\_\_(title, author)

self.pages = pages

def additional\_info(self):

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

class Journal(Publication):

def \_\_init\_\_(self, title, author, issue\_number):

super().\_\_init\_\_(title, author)

self.issue\_number = issue\_number

def additional\_info(self):

print(f"Issue Number: {self.issue\_number}")

novel = Novel("The Great Gatsby", "F. Scott Fitzgerald", 180)

journal = Journal("National Geographic", "Various Authors", 2024)

print("Novel Info:")

novel.display\_info()

novel.additional\_info()

print("\nJournal Info:")

journal.display\_info()

journal.additional\_info()