# Encapsulation/Abstraction

## Assignment-1

1)Write a class named Author with private instance variables name, email, and gender. Create appropriate constructors and getters. Create another class named Book that contains an Author object and has its own private instance variables title and price. Write necessary constructors and methods to display details.

```
class Author {

    private String name;

    private String email;

    private char gender;


    public Author(String name, String email, char gender) {

        this.name = name;

        this.email = email;

        this.gender = gender;

    }


    public String getName() {

        return name;

    }


    public String getEmail() {

        return email;

    }


    public char getGender() {

        return gender;

    }
}
```

```java
class Book {

    private String title;

    private Author author;

    private double price;


    public Book(String title, Author author, double price) {

        this.title = title;

        this.author = author;

        this.price = price;

    }


    public void display() {

        System.out.println("Book: " + title);

        System.out.println("Author: " + author.getName());

        System.out.println("Email: " + author.getEmail());

        System.out.println("Gender: " + author.getGender());

        System.out.println("Price: " + price);

    }
}

public class TestAuthorBook {

    public static void main(String[] args) {

        Author author = new Author("J.K. Rowling", "jkrowling@example.com", 'F');

        Book book = new Book("Harry Potter", author, 500);

        book.display();

    }
}
```