

## Author Class:

- Represents an author with `name`, `email`, and `gender` attributes.
- Includes a constructor to initialize these fields and getter methods to access the attributes.
- `setEmail` allows modifying the author's email.
- `toString` method generates a string representation of the author's details.



```
1 public class Author {
2
3     private String name;
4     private String email;
5     private char gender;
6     public Author(String name, String email, char gender) {
7         this.name = name;
8         this.email = email;
9         this.gender = gender;
10    }
11    public String getName(){
12        return name;
13    }
14    public String getEmail(){
15        return email;
16    }
17    public char getGender(){
18        return gender;
19    }
20    public void setEmail(String email){
21        this.email = email;
```

## Book Class:

- Represents a book with `name`, `author`, `price`, and `quantity` attributes.
- The constructor initializes these fields, and there are getter and setter methods for modifying `price` and `quantity`.
- `toString` method generates a string representation of the book with its name and the author's details.

```

1
2 public class Book{
3     private String name;
4     private Author author;
5     private double price;
6     private int quantity;
7
8     public Book(String name, Author author, double price, int quantity){
9         this.name = name;
10        this.author = author;
11        this.price = price;
12        this.quantity = quantity;
13    }
14    public String getName(){
15        return name;
16    }
17    public Author getAuthor(){
18        return author;
19    }
20    public double getPrice(){
21        return price;
22    }
23    public void setPrice(double price) {
24        this.price = price;

```

### TestAuthor Class:

- Creates an `Author` object and prints its details using `toString()`.
- Modifies the author's email using `setEmail()`.
- Prints individual details (name, email, gender) using getter methods.

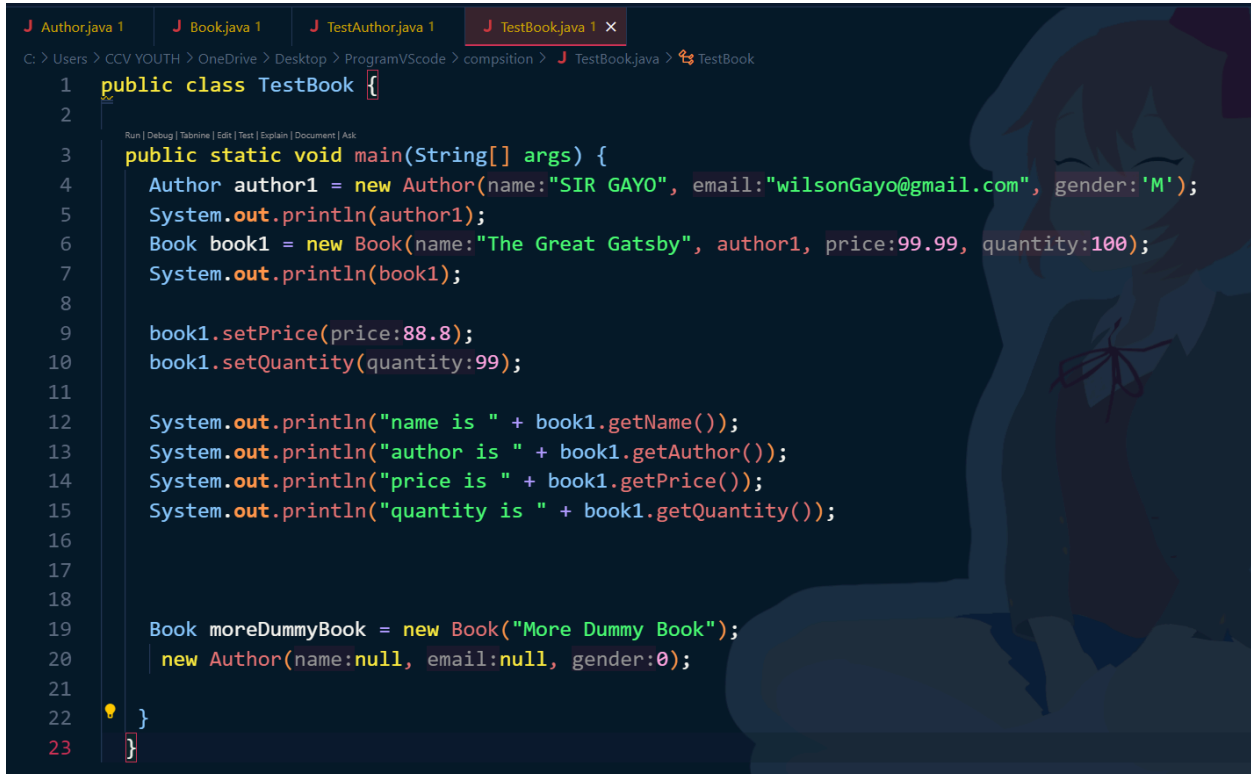
```

1 public class TestAuthor{
2     public static void main(String[] args) {
3         Author author1 = new Author(name:"SIR GAYO", email:"wilsonGayo@gmail.com", gender:'M');
4         System.out.println(author1);
5
6         author1.setEmail(email:"wilson@gmail.com");
7         System.out.println(author1);
8
9         System.out.println("name is " + author1.getName());
10        System.out.println("email is " + author1.getEmail());
11        System.out.println("gender is " + author1.getGender());
12    }
13 }

```

## TestBook Class:

- Creates an **Author** and a **Book** object.
- Displays the book details using the `toString()` method.
- Modifies the book's price and quantity using setter methods.
- The **Book** constructor at the end (`new Book("More Dummy Book")`) is incomplete because it doesn't provide the required arguments like the **author**, **price**, and **quantity**.



```
1 public class TestBook {
2
3     public static void main(String[] args) {
4         Author author1 = new Author(name:"SIR GAYO", email:"wilsonGayo@gmail.com", gender:'M');
5         System.out.println(author1);
6         Book book1 = new Book(name:"The Great Gatsby", author1, price:99.99, quantity:100);
7         System.out.println(book1);
8
9         book1.setPrice(price:88.8);
10        book1.setQuantity(quantity:99);
11
12        System.out.println("name is " + book1.getName());
13        System.out.println("author is " + book1.getAuthor());
14        System.out.println("price is " + book1.getPrice());
15        System.out.println("quantity is " + book1.getQuantity());
16
17
18
19        Book moreDummyBook = new Book("More Dummy Book");
20        new Author(name:null, email:null, gender:0);
21
22    }
23 }
```