

```
*/
```

```
package _2_Assignment_Polymorphism;  
import java.util.*;
```

```
class Publication {  
    int copies;  
    float price;  
    String title;
```

```
    Publication(String title, float price, int copies) {  
        this.title = title;  
        this.price = price;  
        this.copies = copies;  
    }
```

```
    void saleCopy(int quantity) {  
        if (quantity > 0 && quantity <= copies) {  
            copies -= quantity;  
        } else {  
            System.out.println("Invalid quantity. Please enter a valid number of copies.");  
        }  
    }  
}
```

```
class Book extends Publication {  
    String author;
```

```
    Book(String title, float price, int copies, String author) {  
        super(title, price, copies);  
        this.author = author;  
    }
```

```
    void orderCopies(int quantity) {  
        if (quantity > 0) {  
            copies += quantity;  
        } else {  
            System.out.println("Invalid quantity. Please enter a valid number of copies.");  
        }  
    }  
}
```

```
class Magazine extends Publication {  
    int currentIssue;
```

```
    Magazine(String title, float price, int copies, int currentIssue) {  
        super(title, price, copies);  
        this.currentIssue = currentIssue;  
    }
```

```
    void orderQty(int quantity) {  
        if (quantity > 0) {  
            copies += quantity;  
        } else {  
            System.out.println("Invalid quantity. Please enter a valid number of copies.");  
        }  
    }  
}
```

```

    }
}

void receiveIssue(int issueNumber) {
    if (issueNumber > currentIssue) {
        currentIssue = issueNumber;
    } else {
        System.out.println("Invalid issue number. Please enter a higher issue number.");
    }
}
}

public class Publications {
    public static void main(String[] args) {
        Scanner vk = new Scanner(System.in);

        // Input for Book
        System.out.print("Enter title of the book: ");
        String bookTitle = vk.nextLine();

        System.out.print("Enter price of the book: ");
        float bookPrice = vk.nextFloat();

        System.out.print("Enter initial copies of the book: ");
        int bookCopies = vk.nextInt();
        vk.nextLine(); // Consume the newline character

        System.out.print("Enter author of the book: ");
        String bookAuthor = vk.nextLine();

        Book boo = new Book(bookTitle, bookPrice, bookCopies, bookAuthor);

        // Input for Magazine
        System.out.print("Enter title of the magazine: ");
        String magazineTitle = vk.nextLine();

        System.out.print("Enter price of the magazine: ");
        float magazinePrice = vk.nextFloat();

        System.out.print("Enter initial copies of the magazine: ");
        int magazineCopies = vk.nextInt();
        vk.nextLine(); // Consume the newline character

        System.out.print("Enter current issue of the magazine: ");
        int magazineIssue = vk.nextInt();

        Magazine mag = new Magazine(magazineTitle, magazinePrice, magazineCopies, magazineIssue);

        // Ordering copies
        System.out.print("Enter number of copies to order for the book: ");
        int bookOrderQuantity = vk.nextInt();
        boo.orderCopies(bookOrderQuantity);

        System.out.print("Enter number of copies to order for the magazine: ");
        int magazineOrderQuantity = vk.nextInt();
        mag.orderQty(magazineOrderQuantity);

        // Selling copies
        System.out.print("Enter number of copies to sell for the book: ");
        int bookSaleQuantity = vk.nextInt();
    }
}

```

```
boo.saleCopy(bookSaleQuantity);
```

```
System.out.print("Enter number of copies to sell for the magazine: ");
```

```
int magazineSaleQuantity = vk.nextInt();
```

```
mag.saleCopy(magazineSaleQuantity);
```

```
// Displaying total sale
```

```
float bookSale = boo.price * (boo.copies);
```

```
float magazineSale = mag.price * (mag.copies);
```

```
float totalSale = (boo.price * (boo.copies)) + (mag.price * (mag.copies));
```

```
System.out.println("The Author of the Book is: " + bookAuthor);
```

```
System.out.println("The Title of the Book is: " + bookTitle);
```

```
System.out.println("The Price of the Book is: " + bookPrice);
```

```
System.out.println("The Copies Sold of the Book is: " + bookSaleQuantity);
```

```
System.out.println("Book Sale: $" + bookSale);
```

```
System.out.println("The Title of the Magazine is: " + magazineTitle);
```

```
System.out.println("The Price of the Magazine is: " + magazinePrice);
```

```
System.out.println("The Copies Sold of the Magazine is: " + magazineSaleQuantity);
```

```
System.out.println("Magazine Sale: $" + magazineSale);
```

```
System.out.println("Total Sale: $" + totalSale);
```

```
}
```

```
}
```