```
public class Backpacks {
private String phone;
private String homework;
private double zipped;
private static int numItems;                                    //static variable
public Backpacks(String phone, String homework, double zipped, int numItems)
{
       super();
        this.phone = phone;
        this.homework = homework;
        this.zipped = zipped;
        this.numItems = numItems;
 }
 public Backpacks(String homework, int numItems)                //overloaded method
 {
        this.homework =  homework;
        this.numItems = numItems;
 }
 @Override
 public String toString() {
        return getZipped() + "You have "+ numItems + " items\n" +
        getNumItems() + "\n" + getHomework() + getPhone();
 }

        public static int getNumofItems()                       //static method
        {
              return numItems+Book.numOfBooks;
        }

        public Book returnBookClass()                       //returns object reference
        {
        Book book = new Book();
        return book;
        }

 public String getPhone() {
        if (phone.equals("Out"))
        {
        System.out.println("Put your phone away!");
        }
        else
        {
        System.out.println("You are a responsible student!");
        }
        return "";
        }

        public void setPhone(String phone) {
       this.phone = phone;
 }
 public String getHomework() {
        String homework = "";
 if (homework.equals("Out"))
        {
        homework = "Take your homework out.";
```

```
        }
else
        {
        homework = "Your homework better be finished...";
        }
        return homework;
        }
 public void setHomework(String homework) {
        this.homework = homework;
        }
        public String getZipped() {
        while (zipped < 1.0)
        {
        System.out.println("Zip");
        zipped = zipped + .25;
        }
        {
        return "";
        }
        }
 public void setZipped(double zipped) {
        this.zipped = zipped;
       }
 public String getNumItems() {
        String books = "";
        if (numItems > 10)
        {
        books = "Put your books in a locker!";
        }
        else
        {
        books = "Your backpack has everything it needs.";
        }
        return books;
        }
 public void setNumItems(int numItems) {
        this.numItems = numItems;
       }
 }
```

```
import java.util.*;
public class Book
{
       Scanner in = new Scanner(System.in);
       private String author, title, story;
       private int numOfSentences, yearPublished;
       private String fictionOrNon;
       public static int numOfBooks = 3;              //static variable
       public Book ()
       {
              author = null;
```

```
		title = null;
		story = "";
		numOfSentences = 0;
		yearPublished = 0;
	}
	public Book (String authorInit, String titleInit, int numOfSentencesInit, int
yearPublishedInit)
	{
		author = authorInit;
		title = titleInit;
		story = "";
		numOfSentences = numOfSentencesInit;
		yearPublished = yearPublishedInit;

	}

	public Book(String authorInit, String titleInit)    //overloaded method
	{
		author = authorInit;
		title = titleInit;

	}

	public void swapAuthorName(Book b1, Book b2)  //method with formal parameters,
class types
	{
		String auth1 = b1.getAuthor();
		String auth2 = b2.getAuthor();

		b1.setAuthor(auth2);
		b2.setAuthor(auth1);

	}
	public void setAuthor (String newAuthor)
	{
		author = newAuthor;
	}
	public void setTitle (String newTitle)
	{
		title = newTitle;
	}
	public void setNumOfSentences (int newNumOfSentences)
	{
		numOfSentences = newNumOfSentences;
	}
	public void setYearPublished (int newYearPublished)
	{
		yearPublished = newYearPublished;
	}
	public String getAuthor ()
	{
		return author;
	}
	public String getTitle ()
	{
```

```
		return title;
	}
	public int getNumOfSentences ()
	{
		return numOfSentences;
	}
	public int getYearPublished ()
	{
		return yearPublished;
	}
	public void writeBook ()
	{
		for (int i = 0; i < numOfSentences; i++)
	{
			System.out.print ("Enter a sentence for your book: "); story += "
" + in.nextLine();
	}
	System.out.println ("Story finished!");
	}
	public void readStory ()
	{
		System.out.println (story);
	}
	public int findLength ()
	{
		return story.length ();
	}
	public void publish ()
	{
		System.out.println ("--------" + title + "--------\nAuthor: " + author +
"\n" + story + "\n~");
	}
	public void burn ()
	{
		System.out.println ("This isn't WWII! Burning declined. Return NEIN NEIN
NEIN");
	}
	public void clear ()
	{
		story = "";
	}
	public String toString ()
	{
	return "Author: " + author + "\tTitle: " + title + "\tNumber of Sentences: " +
numOfSentences + "\tYearPublished: " + yearPublished;
	}
	}
```

```
public class BackpacksandBooks {

	public static void main(String[]args){
		Backpacks b1 = new Backpacks("In", "Out", .75, 14 );
		Book book1 = new Book("Salinger", "Catcher in the Rye", 21, 1949);
```

```
            /*System.out.println("Open your backpack...");
            System.out.println(b1.toString());
            System.out.println();
            System.out.println("Number of books in the backpack: "+Book.numOfBooks);
//Calls the static variable

            System.out.print("Number of total items in backpack (including Books):
");
            System.out.println(Backpacks.getNumofItems());
            */

            b1.returnBookClass();

      }

}
```