**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();

}

}