Problem 1:
Write a java program which reads the three lines in lyrics.txt, then prints out all three lines on a single line.

Output:
```
[anthony@archlinux YourPrograms]$ java p1
 Say it aint so The world has turned and left me here but only in dreams
```

Problem 2:
Write a java program which first writes the following line to a file named macas.txt

Should I get a cheeseburger or a hamburger?

After writing to the file, prompt the user for an answer to the question. If the user inputs anything other than cheeseburger or hamburger, continue to prompt them until they provide one of those two answers. Then append the following line to macas.txt, without overwritting the first two lines

 I think I will have the {user answer}.

Output:
```
[anthony@archlinux YourPrograms]$ java p2
Should I order the cheeseburger or hamburger?
nah
Should I order the cheeseburger or hamburger?
cheeseburger
[anthony@archlinux YourPrograms]$ cat macas.txt
Should I get a cheeseburger or a hamburger?
I think I will have the cheeseburger.
[anthony@archlinux YourPrograms]$
```

Problem 3:
Write a java program which writes a random integer in the range [1,10] to a binary file called test.bin. Then, read the value back in from the file and print it to the screen. If the result is not within the [1,10] range, throw a IllegalArgument Exception.

Output:
```
[anthony@archlinux Solutions]$ java p3
The Retrieved Value is: 7
```

Problem 4:
Write a java program which defines an interface called *Phone*. Then, define two classes called *Iphone* and *Samsung* which both implement the Phone interface. The phone interface should have abstract methods for:

getMessages: no parameters, returns String Array
sendText: one String parameter, returns nothing
getOwnersName: no parameters, returns String
checkBatteryLife: no parameters, returns integer

The sendText message should just print the argument passed to it.

Tip: a Java program can only have one public class(top level class)

The Iphone and Samsung classes should both have the following attributes:

messages: String Array
batteryLife: integer
ownersName: String

The Iphone class should have both default and non default constructors, but the Samsung class should have only a non default constructor. All methods should be non static.

After completing the above steps, instantiate one iphone and one samsung object (using the Phone type declaration), then print out the owner name,battery life, and object type for each object.
Hint: object.getClass().getTypeName() returns the type of an object.

Output:

```
[anthony@archlinux Solutions]$ java p4
Elbron has a Iphone which is at 100% battery life.
Anthony has a Samsung which is at 75% battery life.
```