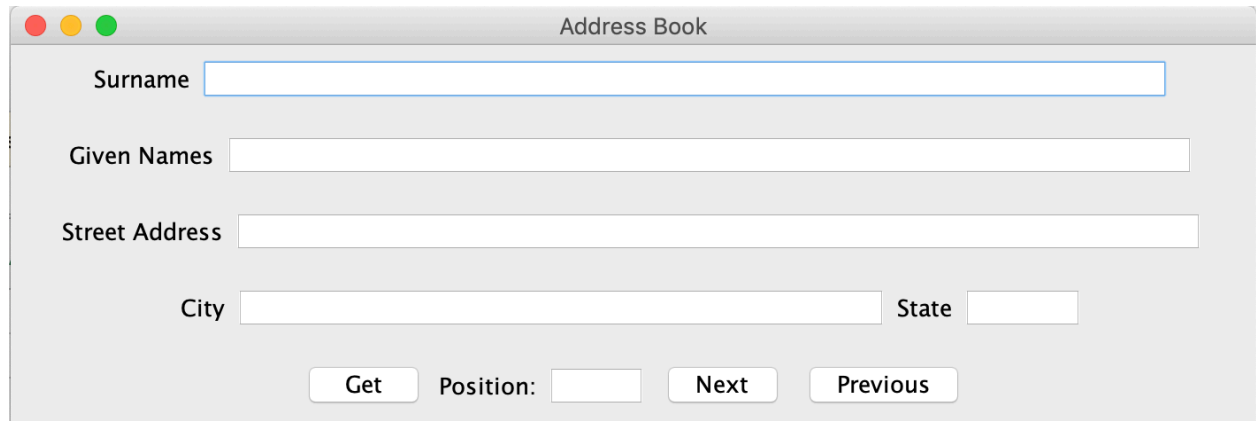


Write a Java program to access entries in an address book. The user interface looks like this:



The screenshot shows a Java Swing window titled "Address Book". It contains four text input fields for "Surname", "Given Names", "Street Address", and "City". The "City" field is followed by a "State" field. Below these fields are four buttons: "Get", "Position:", "Next", and "Previous".

The "Get" button should retrieve and display the entry specified by the given position. Position 1 is at offset 0 in the index.dat file. Position 2 is at offset 8 in the index.dat file. ...

The "Next" button should update the position and display the next entry unless the position is already at the end of the file in which case the display should not change.

The "Previous" button should update the position and display the previous entry unless the position is already at the beginning of the file in which case the display should not change.

If the position is invalid, the display should not change.

You will be given two files:

- addressbook.dat — contains entries in which the five fields have been written using the writeUTF() method.
- index.dat — contains entries written using the writeLong() method. That value is the offset in the addressbook.dat file where the corresponding entry starts. Successive entries in this file provide alphabetical access to the address book entries.

Note:

- As in previous assignments, you will be given code for the GUI. You may add variables and methods but do not change the code that you are given.
- The two files that you will be given are merely an example. I may use files that are much larger. **Thus, reading everything into memory is not acceptable.**