## Sorting by new alpha ordering

QWERTYUIOPASDFGHJKLZXCVBNM -- our new alpha ordering
--the words below we want to sort
PROGRAMMING
COMPETITION
UIL
COMPUTER

--What we should get:

UIL

**PROGRAMMING** 

COMPETITION

COMPUTER

```
import java.io.*;
import java.util.*;
public class Wierd
{
  public static void main(String[] args) throws IOException{
    Scanner scan = new Scanner(new File("weird.dat"));
    String order = scan.nextLine();
    List<String> list = new ArrayList<>();
    while(scan.hasNextLine()){
      list.add(scan.nextLine().trim());
    }
    // now we have brought in the data we write a Comparator to sort the list
    Comparator<String> comp = (a,b)->{
      int min = Math.min(a.length(),b.length());
      //check to see if chars at identical location are different
      for(int i = 0; i<min; i++){
        int ind1 = order.indexOf(a.charAt(i));
        int ind2 = order.indexOf(b.charAt(i));
        if(ind1!=ind2)
          return ind1-ind2;
      }
      //if no chars are different, return the shortest string
      return a.length()-b.length();
    };
    list.sort(comp);
    list.forEach(a-> System.out.println(a));
 }
```