

BHCSI Intermediate Java

Homework Assignment: String Class Practice

Part A (Alpha.java)

Write a program asks the user how many words they are going to enter. Then read in that many words. Determine the word that appears first alphabetically of the ones entered (without regards to upper or lower case letters, hence the word "Pumpkin" would come after the word "hello") and print out that word using the same exact capitalization that was used when the word was entered.

Sample Run

```
How many words are you going to enter?  
5  
Enter the words.  
Pumpkin  
heLlO  
naPkin  
aarDvaRK  
purple  
The first word alphabetically is aardvark.
```

Part B (CountEs.java)

Write a program asks the user how many words they are going to enter. Then read in that many words. Determine the word that has the most occurrences of the letter e (either lower or uppercase) in it of all the ones entered. Print out this word (as it was entered.) If there is a tie print out the first word that was entered of the ones that are tied with the most number of Es.

Sample Run

```
How many words are you going to enter?  
5  
Enter the words.  
heLlO  
naPkin  
TennESeE  
puRple  
threeE  
The word with the most Es is TennESeE.
```

Part C (CountSubs.java)

A substring is a smaller string that appears, in order, in a larger string. For example, the substring "in" appears in "**in**the**in**thereis**an**int**est**ine" four separate times (all bolded). Write a program that asks the user to enter an input string (longer string) followed by a substring to search for in it. Your program should print out the number of separate times the substring appears in the longer string (may be 0). **The appearances can NOT overlap.** So, what you should do is find the first occurrence of the substring and then search from **after the end** of that substring for future occurrences. Use the appropriate String methods to solve the problem.

Sample Run

Enter your string.

inthein**thereis**an**int**est**ine**

Enter the substring you are looking for.

in

The substring appears in the string 4 times.