**Lab Goal**: This lab was designed to teach you more about sorting and searching.

**Lab Description:** Write a program that organizes Strings alphabetically.

## **Sample Output:**

```
addding alice
addding tommy
addding bobby
printing the list :: alice bobby tommy

removing bobby
printing the list :: alice tommy

removing alice
printing the list :: tommy

addding fred
addding xylaphone
printing the list :: fred tommy xylaphone
```

## **Add Algorithm**

- $1^{\rm st}$  Check to see if the item exists in list quit method if item exists
- 2nd- You must call binarySearch() to get the
  insert location for the new item
  The will be no duplicates in the list.
  abs() might be useful!
- $3^{\rm rd}$  You will use add to insert the new item in the proper location.

## **NOTICE**

You may <u>NOT</u> use Arrays.sort() or Collections.sort()!