Credit Name: CSE 2120 Data Structures 1 Assignment Name: Palindrome

Decribe the errors you've encountered while working on this assignment. What caused the error and how do you overcome the error?

```
phrase = phrase.toUpperCase();
for(int i = 0; i < phrase.length(); i++){
   if ((phrase.charAt(i)>= LOW) && (phrase.charAt(i) <= HIGH) ) {
      try
      {
            phraseLetters.add(i, (phrase.charAt(i)));
      }
      catch (Exception ignored) {
      }
   }
}</pre>
```

```
Enter a phrase: hello world
[H, E, L, L, 0]
```

Instead of adding the whole phrase into the array, when it encounters a space (or not a letter), code simply catches the exception, and breaks the for loop; causing it only to add characters up to the space.

```
phrase = phrase.toUpperCase();
for(int i = 0; i < phrase.length(); i++){
   if ((phrase.charAt(i)>= LOW) && (phrase.charAt(i) <= HIGH) ) {
      phraseLetters.add(phrase.charAt(i));
   }
}</pre>
System.out.print(phraseLetters);
```

```
Enter a phrase: hello world
[H, E, L, L, O, W, O, R, L, D]
```

This error occured because it was trying to add a char into an index that was out of bounds.

Solved by adding elements to the end of the array-list, instead of adding them to a specific index.

This ensured that no out of bounds exceptions would occur, and the for loop would run fully.