

# Arrays

---

## Big O:

---

- space  $O(n)$
- time
  - access worst  $O(1)$ , average  $O(1)$
  - search worst  $O(n)$ , average  $O(n)$
  - insert worst  $O(n)$ , average  $O(n)$
  - delete worst  $O(n)$ , average  $O(n)$

---

## ArrayList (Dynamically Resizing Array):

---

```
public ArrayList<String> merge(String[] words, String[] more) {  
    ArrayList<String> sentence = new ArrayList<String>();  
    for (String w : words) sentence.add(w);  
    for (String w : more) sentence.add(w);  
    return sentence;  
}
```

---

---

## Notes:

---

- Index starts with 0