# 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  $\mathrm{O}(\mathrm{n}),$  average  $\mathrm{O}(\mathrm{n})$

## 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

### Sources:

• https://www.coursera.org/lecture/data-structures/arrays-OsBSF