```
class Sort2 {
    public static boolean isSorted2(int[] arr) {
        for(int i = 0; i < arr.length; i += 1) {
            for(int j = i + 1; j < arr.length; j += 1) {
                  if(arr[i] > arr[j]) { return false; }
            }
        }
        return true;
    }
}
```

```
time (ms) vs. # elements, sorted
```

```
250

200

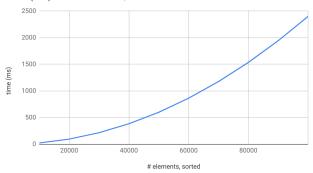
150

100

50

2000000 400000 6000000 8000000
```

time (ms) vs. # elements, sorted



```
boolean isSorted1(int[] arr) {
                                                                                // # of times evaluated
                                                                                // in sorted order
                                                                                                          unordered at index k, k+1
   for(int i = 0;
                                                                                //
        i < arr.length
                                                                                //
                               - 1;
        i += 1) {
                                                                                //
     if(arr[i] > arr[i + 1]) {
                                                                                //
                                                                                //
         return false;
   return true;
                                                                                //
}
```

```
boolean isSorted2(int[] arr) {
                                                                                 // # of times evaluated
                                                                                 // in sorted order
                                                                                                            unordered at index k, k+1
   for(int i = 0;
                                                                                 //
                                                                                 //
         i < arr.length;
         i += 1) {
                                                                                 //
      for(int j = i + 1;
                                                                                 //
                                                                                 //
            j < arr.length;
            j += 1) {
                                                                                 //
         if(arr[i] > arr[j]) {
                                                                                 //
            return false;
                                                                                 //
     }
                                                                                 //
   return true;
}
```

```
boolean find( String[] theList, String toFind ) {
                                                                           // # of times evaluated
                                                                           // toFind NOT FOUND
                                                                                                      toFind FIRST
                                                                                                                        toFind at index k
     for ( int i = 0;
                                                                           //
              i < theList.length;
                                                                           //
                                                                           //
              i += 1 ) {
           if ( theList[i].equals( toFind )) {
                                                                           //
                 return true;
                                                                           //
                                                                           //
     return false;
}
boolean find( String[] theList, String toFind ) {
                                                                           // # of times evaluated
                                                                           // toFind NOT FOUND
                                                                                                      toFind FIRST
                                                                                                                        toFind at index k
                                                                           //
     boolean found = false;
                                                                           //
      for ( int i = 0;
              i < theList.length;
                                                                           //
              i += 1 ) {
                                                                           //
           if ( theList[i].equals( toFind )) {
                                                                           //
                 found = true;
                                                                           //
           }
                                                                           //
     return found;
}
```