

Searching / Sorting

Basic linear/sequential search (Java):

```
// Java code with automatic highlighting

public int search(int[] arr, int value) {
    for (int i = 0; i < arr.length; i++) {
        if (arr[i] == value)
            return i;
    }
    return -1;
}
```

For a binary search, the worse case search time is $\log(n)$

Sorting algorithms:

	Bubble	Merge	Quicksort
Time (n)	n^2	$n \cdot \log(n)$	Worst case n^2 , average case $n \cdot \log(n)$

Delete / Drop / Alter (MySQL)

- Update modifies the data
- Alter [modifies](#) the schemas
- Delete removes the data only
- Drop removes both schema and data

Do a `SELECT` before you delete to see what you're getting

```
UPDATE member
SET last = 'Buck'
WHERE last = 'Doe';
```