

```

public class SortQuick {

    public static void swap(String[] array, int i1, int i2) {
        String temp = array[i1];
        array[i1] = array[i2];
        array[i2] = temp;
    }

    // Change array between low (inclusive) and high (exclusive), such that
    // all values at indices lower than a pivot index are smaller than or equal
    // to the value at the pivot, and all values at indices higher than the pivot
    // are larger than or equal to the value at the pivot
    public static int partition(String[] array, int low, int high) {

    }

    // continued on the back ...

}

```

What is pivot?

Examples depend on pivot

The pivot value is
at index $high - 1$ ★

{ "b", "e", "d", "a", "c" }

↓
{ "b", "a", "c", "d", "e" }

↑
2

{ "3", "2", "1", "5", "4" }

↓
{ "3", "2", "1", "4", "5" }

↑
3

```
public class SortQuick {

    // ... code for partition from last page ...

    public static void sort(int[] arr) {

    }

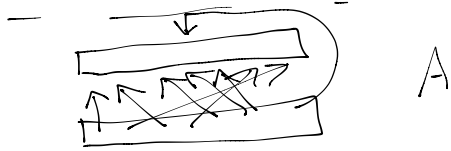
}
```

	Insertion	Selection	Merge	Quick
Best case time				
Worst case time				

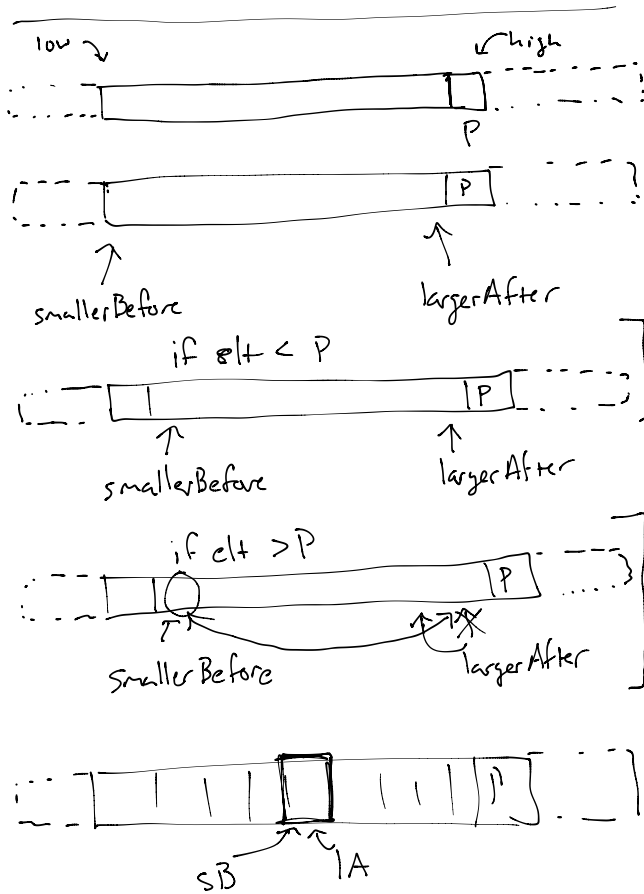
← new array

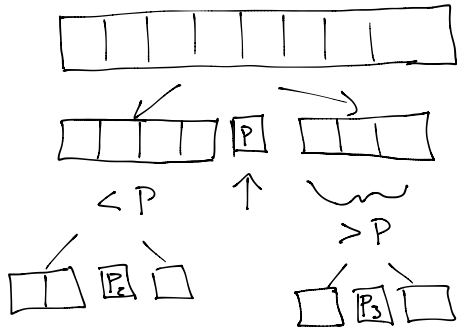
← small elts indices

← large elts indices



Joe had planned B





Quick Sort