Bubble Sort

```
A = 5, 3, 6, 4, 9
```

Pseudo-code:

```
for i = 0 to A.length - 2
  for j = 0 to A.length - 2 - i
    if A[j] > A[j + i]
        tmp = A[j + 1]
        A[j + 1] = A[j]
        A[j] = tmp
```

Time complexity

$$i = 0 \rightarrow 0 \le j \le n-2 \rightarrow (n-1)$$

 $i = 1 \rightarrow 0 \le j \le n-3 \rightarrow (n-2)$
...
 $i = n-2 \rightarrow 0 \le j \le 0 \rightarrow 1$