```
START

found = False
found_index = -1
first = 0
last = len(items)

first ≤ last
and
found == False          False → STOP

True

midpoint = (first + last) // 2

items[midpoint]
== search_item     True → found = True
                          found_index = midpoint

False

items[midpoint]
< search_item      False → last = midpoint - 1

True

first = midpoint + 1
```