```
\begin{split} \text{LINEAR-SEARCH}(A, \, v) \\ \text{for } i &= 1 \text{ to A.length} \\ \text{if } A[i] &== v \\ \text{return } i \\ \text{return NIL} \end{split}
```

Invariant: A[1...i-1] doesn't contain the element

Maintainance: If the next i is the value then end function otherwise continue. **Termination:** At the end if A[1...A.length] don't have v the we will return NIL