Algorithm 3.1.31 Find the first duplicate term in a sequence of integers

1: **procedure** DUPLICATE TERM(a_1, a_2, ..., a_n: sequence of integers)
2:     **for** $index = 2$ to n **do**
3:         **for** $i = 1$ to $(index - 1)$ **do**
4:             **if** $a_i = a_{index}$ **then** $\triangleright$ a_{index} is the first duplicate term.
5:                 **return** $a_{index}, index$
6:             **end if**
7:         **end for**
8:     **end for**
9:     **return** $\perp$ $\triangleright$ No duplicate terms exist.
10: **end procedure**