```
function BinarySearch(sorted_list, num)
    begin_index ← 0
    end_index ← LENGTH[sorted_list]
    while begin_index ≤ end_index do
        mid_idx = FLOOR(begin_index + end_index) / 2
        if sorted_list[mid_idx] = num then
            return mid_idx
        else if num < sorted_list[mid_idx] then
            end_index ← mid_inx − 1
        else
            begin_index ← mid_idx + 1
        end if
    end while
return None
```