

```
START
FUNCTION search_list(list, value):
    SET left = 0
    SET right = length of list - 1

    WHILE left <= right:
        SET middle = (left + right) // 2
        SET mid_value = list[middle]

        IF mid_value == value:
            RETURN middle
        ELSE IF mid_value < value:
            SET left = middle + 1
        ELSE:
            SET right = middle - 1

    RETURN -1 // Value not found
END
```