Q1.

BINARY\_SEARCH(list, hi, lo)

Mid 🡨 (hi+lo)/2

If hi = lo

RETURN FALSE

Else if list[mid] < range\_max AND list[mid] > range\_min

RETURN TRUE

Else if list[mid] > range\_max

RETURN BINARY\_SEARCH(list, hi, mid)

Else if list[mid] < range\_min

RETURN BINARY\_SEARCH(list, mid, lo)