- 1. MERGE-SORT(S, n)
- 2. for i = 1 to n
- 3. if BINARY-SEARCH $(S, 1, n, x S[i]) \neq NIL$
- $4. \hspace{0.5cm} \textbf{return} \hspace{0.1cm} \textbf{YES}$
- 5. **return** NO