Separate-chaining symbol table

Use an array of $M < N$ linked lists. [H. P. Luhn, IBM 1953]

- Hash: map key to integer i between 0 and $M-1$.
- Insert: put at front of ith chain (if not already there).
- Search: need to search only ith chain.

key	hash	value
S	2	0
E	0	1
A	0	2
R	4	3
C	4	4
H	4	5
E	0	6
X	2	7
A	0	8
M	4	9
P	3	10
L	3	11
E	0	12

st[]

0 → A 8 → E 12

1 → null

2 → X 7 → S 0

3 → L 11 → P 10

4 → M 9 → H 5 → C 4 → R 3