

Linear Probing

index	Element
0	68 $H(68) = 0$
1	55 $H(55) = 1$
2	74 $H(74) = 2$
3	39 $H(39) = 1(o) + 1(o) + 1 = 3$
4	64 $H(64) = 4$
5	72 $H(72) = 4(o) + 1 = 5$
6	30 $H(30) = 6$
7	41 $H(41) = 7$

Quadratic Probing

index	Element
0	16 $H(16) = 0$
1	19 $H(19) = 1$
2	14 $H(14) = 2$
3	23 $H(23) = 5(o) + 1(o) + 4(o) + 9 \% 8$

	= 3
4	13 $H(13) = 7(o) + 1(o) + 4 \% 8 = 4$
5	24 $H(24) = 0(o) + 1(o) + 4 \% 8 = 5$
6	26 $H(26) = 6$
7	29 $H(29) = 7$

Double Hashing

index	Element
0	80 $H1(80) = 0$
1	49 $H1(49) = 1$
2	14 $H1(14) = 6(o)$ $H2(14) = 4$ $H(14) = 10\%8 = 2$
3	53 $H1(53) = 5(o)$ $H2(53) = 3(o) * 2$ $H(53) = 11\%8 = 3$
4	50 $H1(50) = 2(o)$ $H2(50) = 2$ $H(50) = 4$
5	23 $H1(23) = 7(o)$ $H2(23) = 7(o) * 2 = 14$

	$H(23) = 21\%8 = 5$
6	22 $H1(22) = 6$
7	39 $H1(39) = 7$

Cuckoo Hashing

Index	Table 1	Table 2
0	23 $H1(23) = 0$ Bump 9	24 $H1(24) = 3$ Bumped by 87 $H2(24) = 0$
1		
2	47 $H1(47) = 2$	
3	87 $H1(87) = 3$ Bumps 24	
4	15 $H1(15) = 4$	9 $H1(9) = 0$ Bumped by 23 $H2(9) = 4$
5	20 $H1(20) = 5$	12 $H1(12) = 2$ Bumped by 47 $H2(12) = 5$
6		