

a) Division method (non-prime)

$$N = 10$$

$$h(k) = k \cdot 10$$

0	
1	
2	→ 12 → 22 → 72 → 902 → 62 → 42
3	
4	
5	
6	→ 56 → 106 → 36 → 86 → 96
7	
8	
9	

b) Division method (prime)

$$N = 13$$

$$h(k) = k \% 13$$

0	
1	
2	→ 106
3	→ 42
4	→ 56
5	→ 902 → 96
6	
7	→ 72
8	→ 86
9	→ 22
10	→ 36 → 62
11	
12	→ 12

c) MAD method

$$N = 10, p = 1009, a = 125, b = 342$$

$$h(k) = ((125 * k + 342) \% 1009) \% 10$$

0	→ 62
1	→ 72
2	→ 86
3	→ 12
4	→ 902 → 96
5	→ 22 → 106
6	→ 36
7	→ 42
8	
9	→ 56