

Q1:

a)

$$h_1(k) = k \bmod 10$$

0	
1	
2	
3	
4	
5	
6	
7	
8	
9	

— 12, 22, 72, 902, 62, 42

— 56, 106, 36, 86, 96,

$N=10$

b)

$$h_2(k) = k \bmod 13$$

0	
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	

— 206

— 42

— 56

— 902, 96

— 72

— 86

— 22

— 36 62

— 12

$N=13$

c)

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

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

N=11

Q2:

$$h(x) = k \bmod 11$$

0	- 132
1	
2	- 46
3	- 135
4	- 59
5	- 911
6	- 39
7	
8	- 169
9	
10	- 277

N=11

(i=2)

After delete:

0	- 132
1	
2	- 135
3	- 59
4	- 911
5	- 157
6	
7	
8	- 169
9	
10	- 277

final insert