

$$h(x) = x \bmod 13 \text{ y } h'(x) = (h(x) + i) \bmod 13$$

Claves : 11, 3, 27, 99, 8, 50, 77, 22, 12, 31, 33, 40, 53

$$h(x) = 11 \bmod 13 = 11$$

$$h(x) = 3 \bmod 13 = 3$$

$$h(x) = 27 \bmod 13 = 12$$

$$h(x) = 99 \bmod 13 = 8$$

$$h(x) = 8 \bmod 13 = 8 \qquad h'(x) = (8 \bmod 13) + 1 = 9$$

$$h(x) = 50 \bmod 13 = 11 \qquad h'(x) = (50 \bmod 13) + 1 = 12$$

$$h(x) = 77 \bmod 13 = 12 \qquad h'(x) = (77 \bmod 13) + 1 = 0$$

$$h(x) = 22 \bmod 13 = 9 \qquad h'(x) = (22 \bmod 13) + 1 = 10$$

$$h(x) = 12 \bmod 13 = 12 \qquad h'(x) = (12 \bmod 13) + 1 = 0 \qquad h'(x) = (12 \bmod 13) + 2 = 1$$

$$h'(x) = (12 \bmod 13) + 3 = 2$$

$$h(x) = 31 \bmod 13 = 5$$

$$h(x) = 33 \bmod 13 = 7$$

$$h(x) = 40 \bmod 13 = 1 \qquad h'(x) = (40 \bmod 13) + 1 = 2 \qquad h'(x) = (40 \bmod 13) + 2 = 3$$

$$h'(x) = (40 \bmod 13) + 3 = 4$$

$$h(x) = 53 \bmod 13 = 1 \qquad h'(x) = (53 \bmod 13) + 1 = 2 \qquad h'(x) = (53 \bmod 13) + 2 = 3$$

$$h'(x) = (53 \bmod 13) + 3 = 4 \qquad h'(x) = (53 \bmod 13) + 4 = 5 \qquad h'(x) = (53 \bmod 13) + 5 = 6$$

1	77	27	12	3	40	31	53	33	99	8	22	11	50
	0	1	2	3	4	5	6	7	8	9	10	11	12

c) pseudoazar  $h'(x) = [h(x) + Z_i] \bmod M$   $Z=(1,5,2,4,3,6)$

Claves : 11, 3, 27, 99, 8, 50, 77, 22, 12, 31, 33, 40, 53

$h(x)=11 \bmod 13 = 11$

$h(x)=3 \bmod 13 = 3$

$h(x)=27 \bmod 13 = 12$

$h(x)=99 \bmod 13 = 8$

$h(x)=8 \bmod 13 = 8$                        $h'(x) = (8 \bmod 13)+1 = 9$

$h(x)=50 \bmod 13 = 11$                        $h'(x) = (50 \bmod 13)+1 = 12$

$h(x)=77 \bmod 13 = 12$                        $h'(x) = (77 \bmod 13)+1 = 0$

$h(x)=22 \bmod 13 = 9$                        $h'(x) = (22 \bmod 13)+1 = 10$

$h(x)=12 \bmod 13 = 12$        $h'(x) = (12 \bmod 13)+1 = 0$                        $h'(x) = (12 \bmod 13)+5 = 4$

$h(x)=31 \bmod 13 = 5$

$h(x)=33 \bmod 13 = 7$

$h(x)=40 \bmod 13 = 1$        $h'(x) = (40 \bmod 13)+1 = 2$

$h(x)=53 \bmod 13 = 1$        $h'(x) = (53 \bmod 13)+1 = 2$                        $h'(x) = (53 \bmod 13)+5 = 6$

1	77	27	40	3	12	31	53	33	99	8	22	11	50
	0	1	2	3	4	5	6	7	8	9	10	11	12