

21801679

Q1 $h(x) = x \bmod 16$

$$h(3) = 3 = 0011$$

$$h(15) = 7 = 0111$$

$$h(71) = 7 = 0111$$

$$h(29) = 13 = 1101$$

$$h(25) = 9 = 1001$$

$$h(92) = 12 = 1100$$

$$h(111) = 15 = 1111$$

$$h(16) = 0 = 0000$$

$$h(22) = 6 = 0110$$

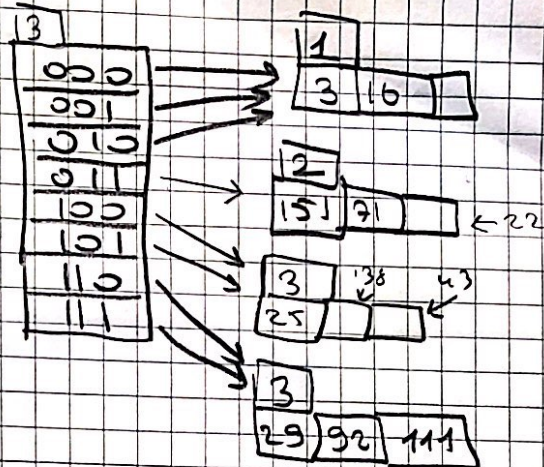
$$h(138) = 10 = 1010$$

$$h(43) = 11 = 1011$$

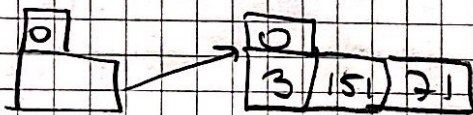
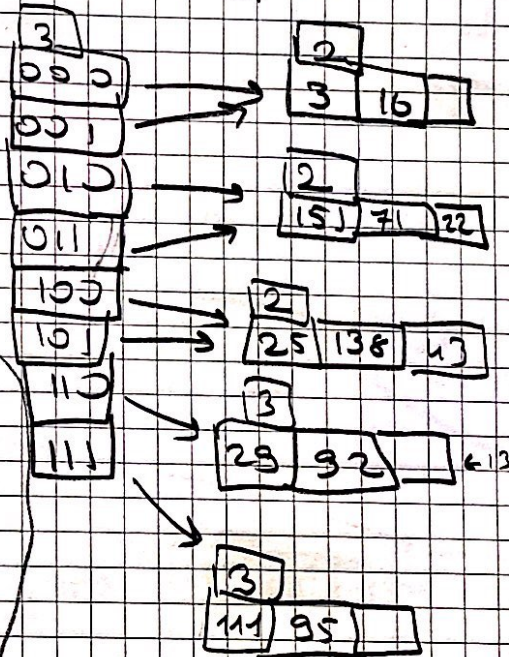
$$h(95) = 15 = 1111$$

$$h(41) = 9 = 1001$$

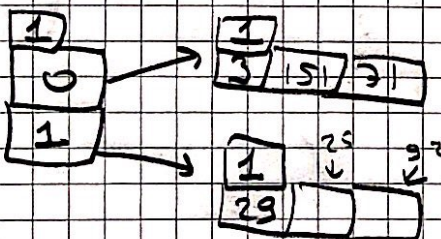
16 leads to split



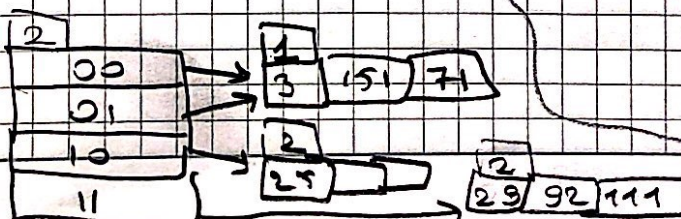
95 leads to split



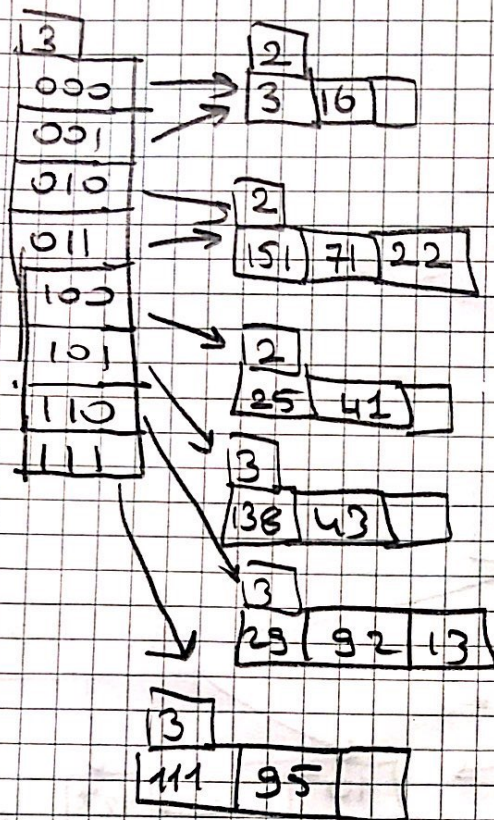
29 leads to split



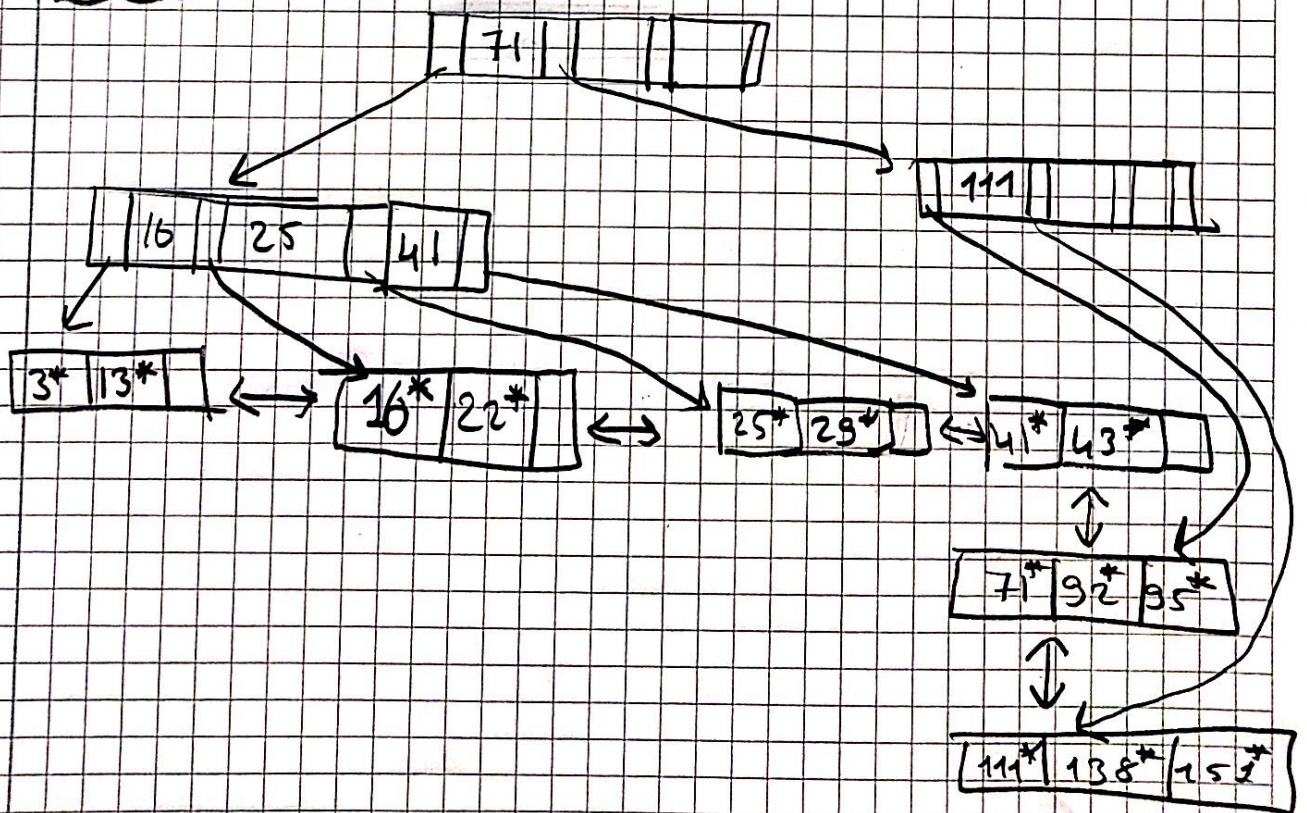
111 leads to split



41 leads to split

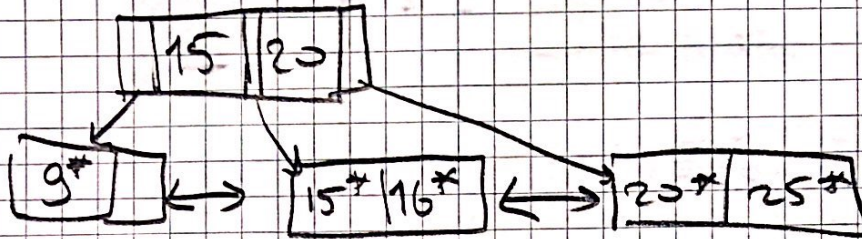


Q2



Q3

a)



b)

