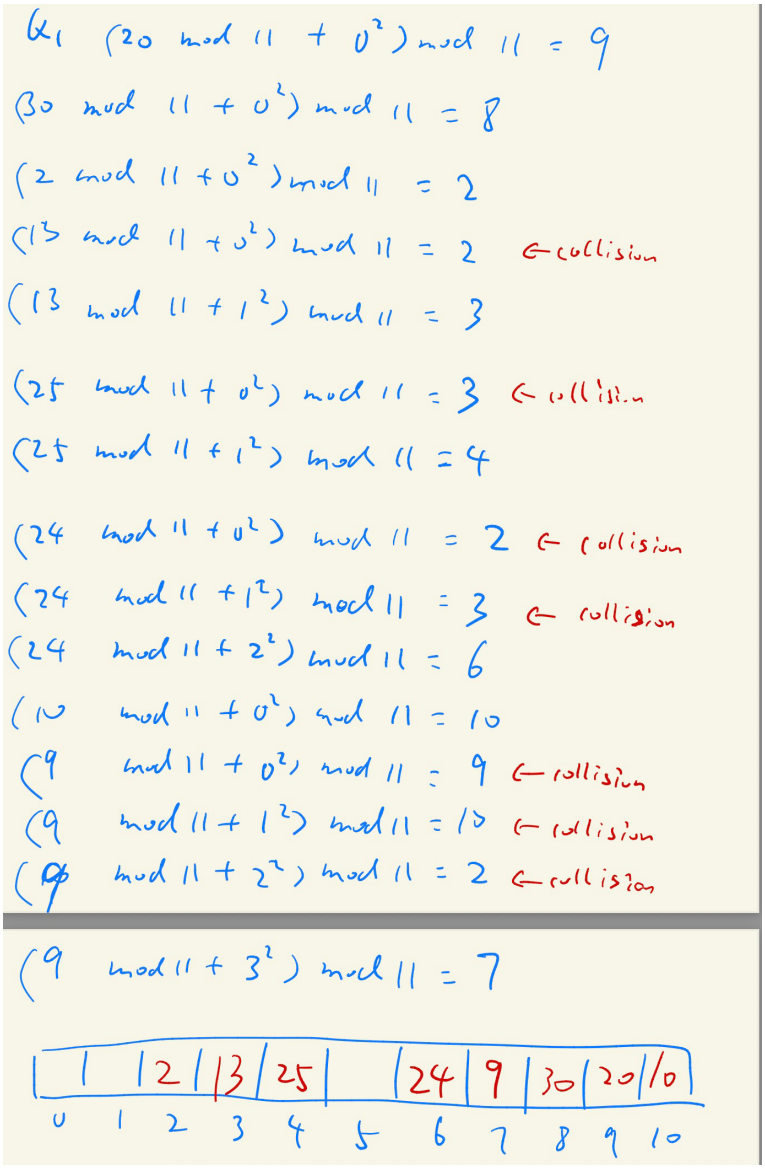
Quiz 3 Solutions

Q1

Correctly placing one number receives 0.5



Q2

Correctly placing one number receives 0.5

2 $h=(h_1(2)+0\times h_2(2)) \bmod 13 = 2$

8 $h=(h_1(8)+0\times h_2(8)) \bmod 13 = 8$

31 $h=h_1(31)+0\times h_2(31) = 5$

20 $h=h_1(20)+0\times h_2(20) = 7$

19 $h=h_1(19)+0\times h_2(19) = 6$

18 $h=h_1(18)+0\times h_2(18) = 5$ ← collision

$h=h_1(18)+1\times h_2(18) = 5+1\times 3 = 8$ ← collision

$h=h_1(18)+2\times h_2(18) = 5+2\times 3 = 11$

53 $h=(h_1(53)+0\times h_2(18)) \bmod 13 = 1$

27 $h=(h_1(27)+0\times h_2(27)) \bmod 13 = 1$ ← collision

$h=(h_0(27)+1\times h_2(27)) \bmod 13 = 6$ ← collision

$h=(h_1(27)+2\times h_2(27)) \bmod 13 = 11$ ← collision

$h=(h_0(27)+3\times h_2(27)) \bmod 13 = 3$