

runLengthEncode and Merge Sort Office Hours Discussion Notes

(Haskell)

Wednesday, July 27, 2022 12:19 PM

runLengthEncode ^x (a, ^{xs} a, b, c, a)
 [(2,a), (1,b), (1,c), (1,a)]

the currently completely
 encoded result

unLengthEncode [] = []

runLengthEncode (x:xs) = doRLE [] (1,x) xs

doRLE current (cc, cl) [x,xs] | x == cl = doRLE current (cc+1, cl) xs

| otherwise = doRLE current ++ [(Span cc cl)] (1,x) xs

doRLE current (cc, cl) [] = current ++ [(Span cc cl)]

merge res cmp (lh:lr) (rh:rr) | cmp l r = merge res ++ [lh] cmp lr [rh:rr]

| otherwise = " " [rh] cmp (lh:lr) rr