

9/2/15 week one: identification numbers

Check digit: digit appended to an ID which allows you to verify the accuracy of the other numbers.

error types -

single digit	123	173
transposition	123	132
multiple digit	123	683
jump transposition	123	321

★ UPC codes: 12 digit barcode ID, last digit is a check digit. "Weighted Sum" ends in 0, is valid.

8845 0211 5161
• multiply odd digits $\times 3$
even digits $\times 1$
= 90, is valid

wednesday 9/09

• Codabar is used to catch errors in credit card #s.
• Catches 100% of single digit errors & 98% of others.

★ credit cards have 16 digits, last number is a "check digit"

- ↳ odd digits $\times 2$
even digits $\times 1$
- ↳ number must end in 0 once added up: numbers in odd places bigger than 4.