CMSC423: Bioinformatic Algorithms, Databases and Tools

Exact string matching:
not just for matching anymore

Z algorithm, not just for matching

- Lempel-Ziv compression (e.g. gzip)

$Z[i]$ i $i + Z[i] - 1$ n

  if $Z[i] = 0$, just send/store the character $T[i]$, otherwise,
  instead of sending $T[i..i+Z[i] - 1]$ ($Z[i] - 1$ characters/bytes)
  simply send $Z[i]$ (one number)

- Other exact matching algorithms used for data compression
  (e.g. Burrows-Wheeler transform relates to suffix arrays)