

Meeting 12/8/17

Friday, December 8, 2017 12:00 PM

Attendees:

Kirby, Andy

Dylan, Alex

Agenda:

- Discuss last week's experiments
- Find an equation to calculate compression ratios

From last week:

No matter the permutations, Oracle will move columns with low cardinality to the beginning
One token created

Goals:

Want to calculate compression ratio

- How big is token table
- How big is the token

Pseudo equation:

Uncompressed block:

Block = Header + 2 + 1(N, where N = number of columns) + L_{c1-n} (summation from 1 to n = Length)

R = Rows

Block =>

Fixed = Header (84-107 bytes) variable overhead = fixed + lookup OFFSET

Variable = (Rows)*2

= 2 + N ROW HEADER

Summation from 1 to N = L

L = column length

Equation:

$$H + 2R + 2 + N + L = 8192$$

$$8192 - H - LR - 5R = 0$$

$$8192 - H = (5 + L) R$$

$$\underline{[(8192 - H) / (5 + L)] = R}$$

Remove offset list

Row directory

of rows * 2