

Database Compression @abc

- Improves speed and performance
- Data is usually skewed so compression brings efficiency
- Able to perform most of the query processing on compressed data is the core requirement of a db compression

Lossless, original data can be fully restored



Can be done over column,
block, Tuple or Attribute level

Lossy Compression, data size reduction



OLAP & OLTP have different kinds of data compression

Popular compression algorithms

ZStandard

Snappy

LZO(4)

Compression Techniques

- ✓ Run length Encoding
- ✓ prefix Encoding
- ✓ Dictionary Encoding
- ✓ Null Supression
- ✓ Lempel Zug encoding
- ✓ Hybrid Columnar Compression