Column Store

HBase as an example:
- non-relational
- mode for big-jobs (terabytes of data
                      and 10s of nodes)

HBase history
- Apache project
      base on
      "BigTable: A distributed Storage System for Structured Data"

Unique Feature:
- scalable
- distributed config (no central point of failure)
- tolerate node failure in a large cluster
- versions data
- compression
- garbage collection (expand later)
- consistency and partition tolerance (CP)

Data model
- maps of maps
      key (string) → "row" of data
                      map w/ key called ==columns==
                      grouped into ==column families==
                      values are byte arrays

	row keys	column family "color"	column family "shape"
row	"first"	"red": "#F00" "blue": "#00F" "yellow": "#FF0"	"square": "4"
row	"second"		"triangle": "3" "square": "4"