Data Placement Strategies

- Replication Strategy: two options:
 - 1. SimpleStrategy
 - 2. NetworkTopologyStrategy
- 1. <u>SimpleStrategy</u>: uses the Partitioner, of which there are two kinds
 - 1. RandomPartitioner: Chord-like hash partitioning
 - 2. *ByteOrderedPartitioner*: Assigns ranges of keys to servers.
 - Easier for <u>range queries</u> (e.g., Get me all twitter users starting with [a-b])
- 2. <u>NetworkTopologyStrategy</u>: for multi-DC deployments
 - Two replicas per DC
 - Three replicas per DC
 - Per DC
 - First replica placed according to Partitioner
 - Then go clockwise around ring until you hit a different rack