Bounded Evaluation

— A new paradigm for query processing

Basics of Bounded Evaluation

*Store "models" (***access constraints + data oracles***) instead of datasets*

Access constraint: $\phi = R(X \rightarrow Y, N)$

- ▶ For each X-value, there are at most N distinct Y values in R

Data oracle: attribute-based data access $\text{fetch}(\bar{x}, \phi)$

- ▶ given X-value, retrieve associated Y-values with bounded cost (N)