**Input Vectors**

* Attribute Types (multiple fields in raw\_data)
* Attribute Names (one field in raw\_data; will be an IDENTIFIER)
* New Attribute Names (one field in raw\_data)
* Keys (one field in raw\_data; will be an IDENTIFIER)
* Tuple (one field in raw\_data; will be INTEGER or LITERAL)
* All located in Parser.h

**Queries**

Select

In Parser: selection()

1. Parse
2. Get all tuples form atomic\_expr()’s view or relation
3. Run condition tree on all tuples, find all indices that satisfy condition
4. Db.select() for each valid index

In Database: select()

1. Throw error if no such table exists
2. Throw error if a tuple with identical key already exists

Project

In parser: projection()

Rename

Union (PLUS)

Difference (MINUS)

Product (TIMES)

Expression() must return strings

Atomic\_expr() must return strings