

Record

- Constructor:
Record(unsigned int size)
size identifies the number of element in the record.

- operator[]

Element access, to get the i^{th} element, use record[i]

Table

- Constructor:
Table() // creates an empty table
Table(string[] attributes, int size) // creates a table with a list of attributes
- **add(string attr)**
adds an attribute to the table
- **del(string attr)**
deletes an attribute from the table
- **insert(Record r)**
inserts a record into the table
- **get_attributes()**
returns a list of all attributes in the table
- **size()**
returns the size of the table
- **operator[]**
access the record at the given index
- **begin(), end()**
respective iterators over records
- **rename(string attr1, string attr2)**
renames from the first attribute to the name of the second attribute
- **cross_join(Table other_table)**
cross joins this table with another table and stores the result in this table
- **natural_join(Table other_table)**
naturally joins these tables and stores the result in this table
- **count_attr(string attr)**
returns the number of elements specified by this attribute

- **min_attr()**
returns the lowest element specified by this attribute
- **max_attr()**
returns the highest element specified by this attribute

Database

- Constructor:
Database()
- **add_table(string name, Table t)**
adds a table to this database
- **drop(string name)**
removes a table, by name, from the database
- **save(string filename)**
saves this database to a file
- **load(string filename)**
clears the current database and loads new contents from a file
- **merge(Database d)**
merge two databases and store the result in this database
- **copy()**
returns a copy of this database
- **get_table_names()**
returns the names of all tables in this database
- **get_tables()**
returns all tables in this database
- **query(string select, string from, string where)**
queries the database and returns the appropriate data
- **del(string select, string from, string where)**
queries the database and deletes the appropriate data
- **update(string name, string where, string set)**
queries the database and updates the appropriate data