

```
chain_of(
  with_elements(load_postgres_table(("public", "patient"), ["id"], [Int32])),
  flatten())
```



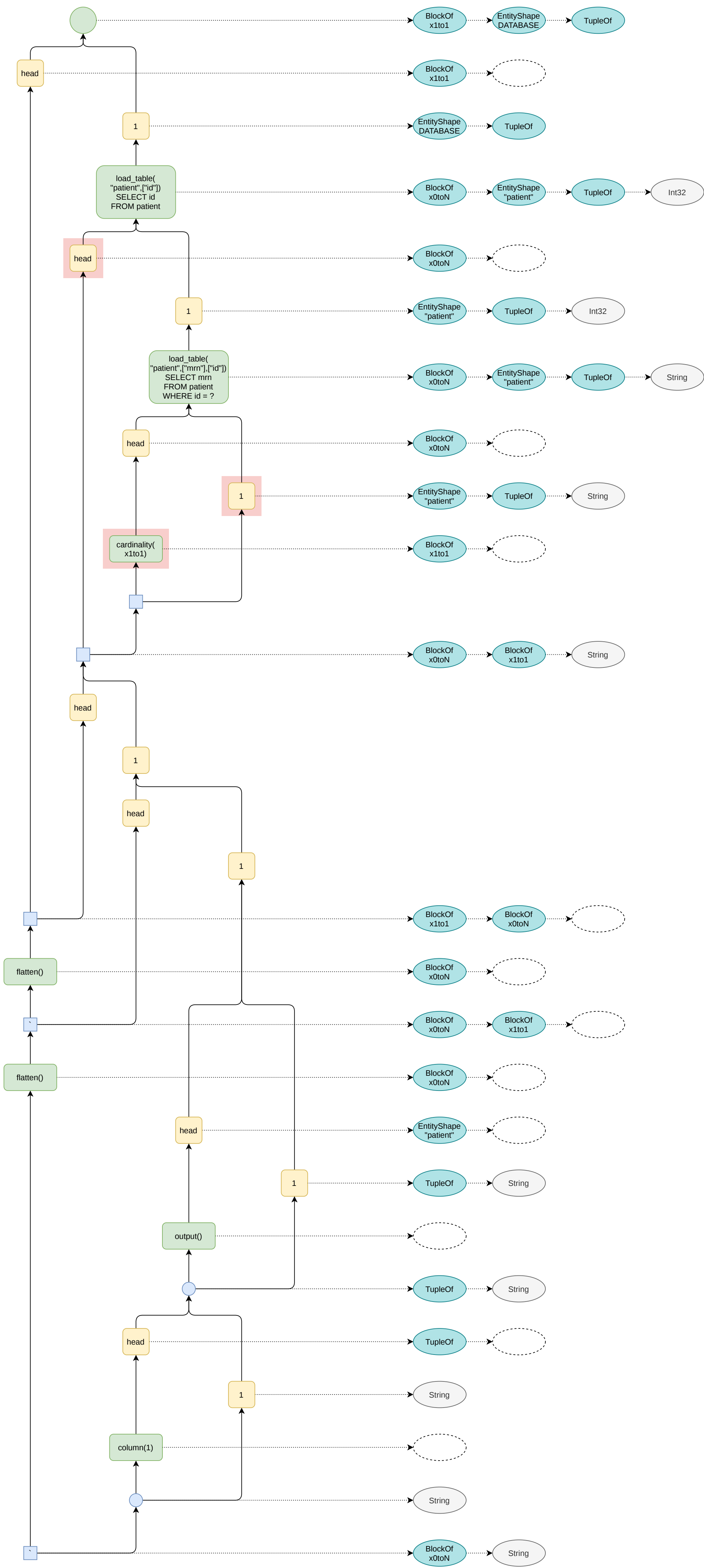
The diagram illustrates a complex computational graph for a neural network architecture, likely for a database query execution plan. The graph is composed of several interconnected nodes and edges, representing data flow and operations.

**Key Components and Operations:**

- Input/Output Nodes:** The graph starts with an input node (green circle) and ends with an output node (green circle). Intermediate nodes include "head" (yellow rectangle), "1" (yellow rectangle), "load\_table" (green rectangle), "cardinality" (green rectangle), "output" (green rectangle), and "column" (green rectangle).
- Database Operations:** The "load\_table" nodes represent database queries:
  - `load_table("patient"["id"]) SELECT id FROM patient`
  - `load_table("patient"["mn"],["id"]) SELECT mn FROM patient WHERE id = ?`
- Cardinality and Output:** The "cardinality" node is labeled `cardinality(x1to1)`. The "output" node is labeled `output()`. The "column" node is labeled `column(1)`.
- Shaded Regions:**
  - A large blue shaded region covers the central part of the graph, including the "load\_table" nodes and the "cardinality" node.
  - A large orange shaded region covers the right side of the graph, including the "output" node and the "column" node.
- Connections and Flow:**
  - The input node connects to a "head" node.
  - The "head" node connects to a "1" node.
  - The "1" node connects to the "load\_table" node.
  - The "load\_table" node connects to another "head" node.
  - The "head" node connects to a "1" node.
  - The "1" node connects to the "load\_table" node.
  - The "load\_table" node connects to a "cardinality" node.
  - The "cardinality" node connects to a "head" node.
  - The "head" node connects to a "1" node.
  - The "1" node connects to the "load\_table" node.
  - The "load\_table" node connects to an "output" node.
  - The "output" node connects to a "1" node.
  - The "1" node connects to the "column" node.
  - The "column" node connects to a "head" node.
  - The "head" node connects to a "1" node.
  - The "1" node connects to the "column" node.
  - The "column" node connects to the final output node.

The graph shows a complex flow of data and operations, with multiple paths and connections between nodes, indicating a highly structured and potentially optimized execution plan.







```
chain_of(with_elements(load_postgres_table(("public", "patient"), ["id"], [Int32])),
  flatten(),
  with_elements(
    chain_of(
      load_postgres_table(("public", "patient"), ["mrn"], [String], ["id"]),
      block_cardinality(x1to1))),
  flatten()),
  with_elements(
    chain_of(
      output(),
      column(1))))
```



















