

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



The diagram illustrates the execution of a SQL query, showing the flow of data and the corresponding data structures. The left side represents the query plan, and the right side represents the data structures.

Query Plan (Left Side):

- load_table("patient", ["id"]) SELECT id FROM patient:** This node is highlighted in a light blue box. It has a **head** node and a **1** node.
- load_table("patient", ["mrm"], ["id"]) SELECT mrm FROM patient WHERE id = ?:** This node is also highlighted in a light blue box. It has a **head** node and a **1** node.
- cardinality(x1to1):** This node is highlighted in a light red box. It has a **head** node and a **1** node.
- flatten():** There are two instances of this node, one for each **load_table** node.
- output():** This node is highlighted in a light blue box. It has a **head** node and a **1** node.
- column(1):** This node is highlighted in a light blue box. It has a **head** node and a **1** node.

Data Structures (Right Side):

- BlockOf x1to1:** A teal oval representing a block of data.
- EntityShape DATABASE:** A teal oval representing the database schema.
- TupleOf:** A teal oval representing a tuple of data.
- Int32:** A grey oval representing an integer value.
- String:** A grey oval representing a string value.

The diagram shows the flow of data from the query plan to the data structures. The **load_table** nodes are connected to the **BlockOf** and **EntityShape** nodes. The **cardinality** node is connected to the **BlockOf** and **TupleOf** nodes. The **flatten** nodes are connected to the **BlockOf** and **TupleOf** nodes. The **output** node is connected to the **TupleOf** and **String** nodes. The **column** node is connected to the **BlockOf** and **String** nodes.







```
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))))
```















