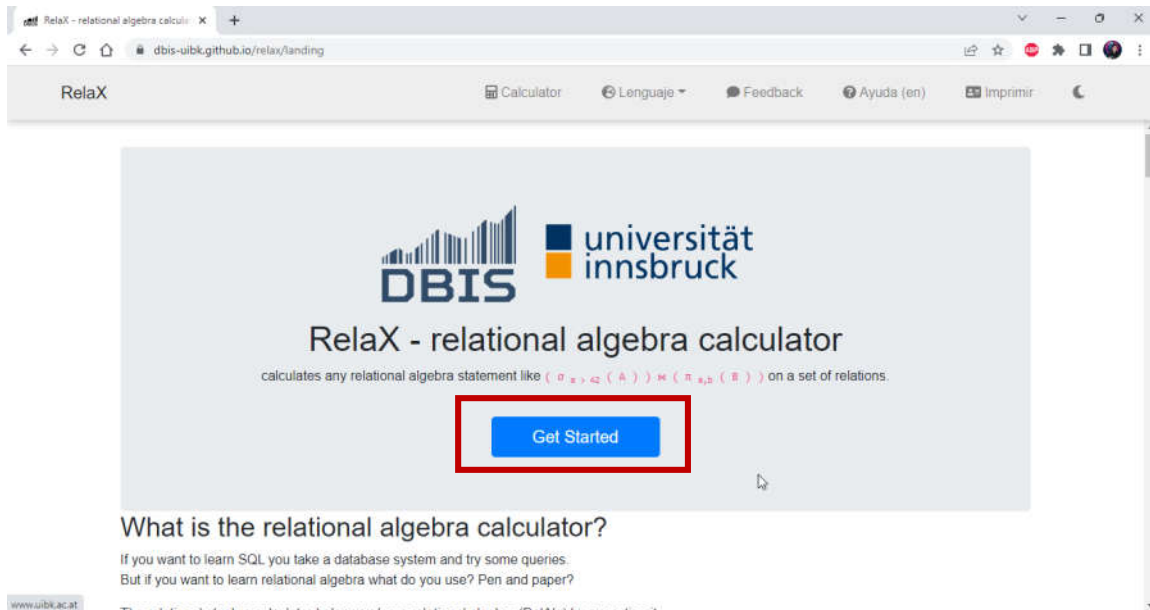


## Probar las consultas de álgebra relacional con Relax

1. Ir a la siguiente dirección:

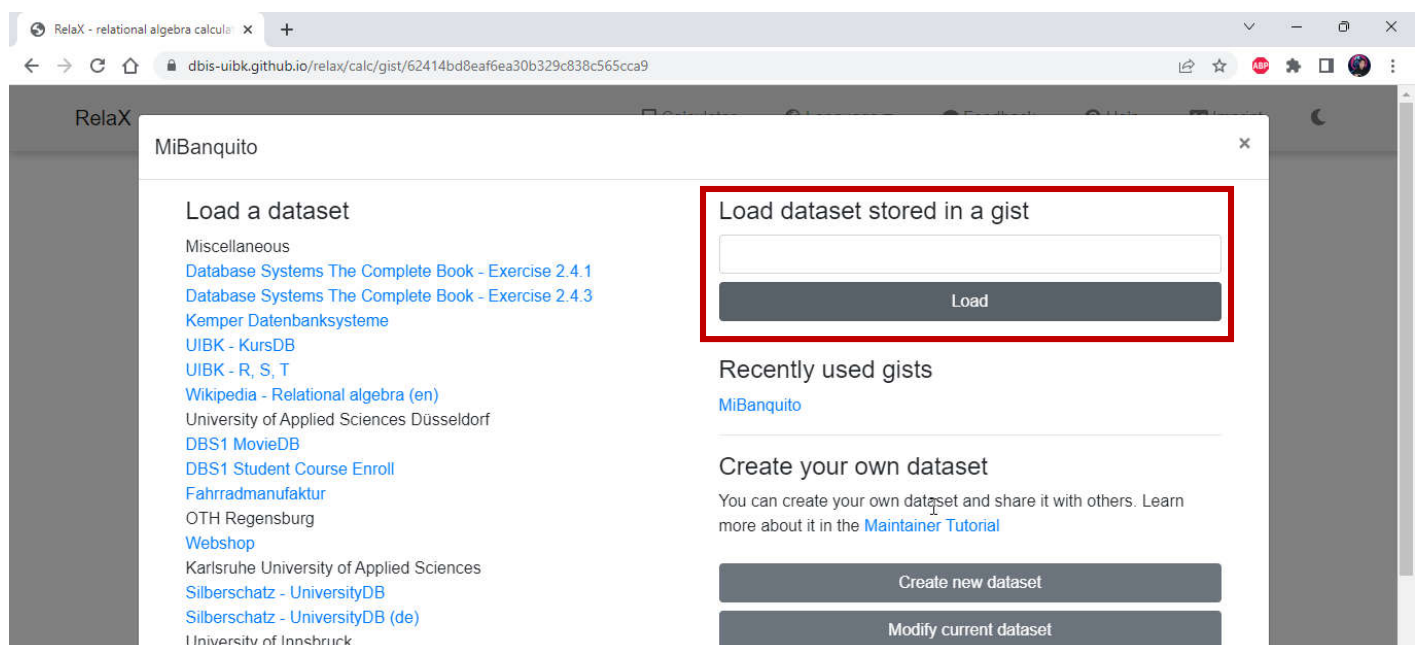
<https://dbis-uibk.github.io/relax/landing>

una vez **desplegada la página**, dar clic en el botón **Get Started**:



2. En la **siguiente ventana**, dar clic en la opción **Select DB (UIBK - R, ...)**

3. En la opción que se despliega, ir a la opción **Load dataset stored in a gist**:



- Copiar el código `62414bd8eaf6ea30b329c838c565cca9` y dar clic en **Load**.
- Una vez realizado este proceso, se debe mostrar el **esquema relacional** que estamos revisando en clase:

The screenshot shows the Relax web application interface. On the left, a sidebar displays the database schema for 'MiBanquito'. The schema includes tables: **cliente** (numcta string, idcliente number), **cuenta** (numcta string, numsucursal number, number, saldo number, fecha date), **prestario** (numprestamo string, idcliente number), **prestamo** (numprestamo string, numsucursal number, importe number, fecha date), and **sucursal** (nombresucursal string, estado string, activo number). The 'cliente' table is highlighted with a red box. On the right, the 'Relational Algebra' tab is active in the query editor. It shows a toolbar with various operators and a text area with the placeholder '1 your query goes here ...'. Below the text area, keyboard shortcuts are listed: 'execute statement: [CTRL]+[RETURN]', 'execute selection: [CTRL]+[SHIFT]+[RETURN]', and 'autocomplete: [CTRL]+[SPACE]'. At the bottom of the editor, there is a blue 'execute query' button, a 'Download' button, and a 'History' button.

- En el espacio de trabajo que se muestra, se van a escribir (o copiar) las consultas en álgebra relacional y para ver el resultado, se debe dar clic en **execute query**:

This screenshot shows the Relax web application after a query has been executed. The 'execute query' button in the previous image is now highlighted with a red box. The query entered in the Relational Algebra editor is:  $\sigma_{\text{nombresucursal} = \text{'PINOTEPA'} \vee \text{nombresucursal} = \text{'HUATULCO'}} (\text{prestamo} \bowtie \text{sucursal})$ . Below the query editor, the result is visualized as a tree diagram. The root node is a selection operation  $\sigma$  with the condition  $\text{nombresucursal} = \text{'PINOTEPA'} \vee \text{nombresucursal} = \text{'HUATULCO'}$ , indicating 106 rows. This operation is applied to a join operation  $(\bowtie)$ , which has 1845 rows. The join operation is the result of joining two tables: 'prestamo' (1845 rows) and 'sucursal' (26 rows). The sidebar on the left remains the same, showing the database schema.