

XML

```
<?xml version="1.0" encoding="UTF-8"?>
<ciclos>
  <ciclo codigo="ASIR">
    <nombre>Administracion de Sistemas Informaticos en Red</nombre>
    <grado>Superior</grado>
  </ciclo>
  <ciclo codigo="DAM">
    <nombre>Desarrollo de Aplicaciones Multiplataforma</nombre>
    <grado>Superior</grado>
  </ciclo>
  <ciclo codigo="DAW">
    <nombre>Desarrollo de Aplicaciones Web</nombre>
    <grado>Superior</grado>
  </ciclo>
  <ciclo codigo="SMR">
    <nombre>Sistemas Microinformaticos y Redes</nombre>
    <grado>Medio</grado>
  </ciclo>
</ciclos>
```

PRUEBAS

The screenshot shows the BaseX 11.9 application window. The title bar reads "file* [ciclos] - BaseX 11.9". The menu bar includes Database, Editor, View, Visualization, Options, and Help. The toolbar contains various icons for file operations and editing. The main window is divided into several panes:

- File Explorer:** Shows the file system structure with folders like bin, data, etc, lib, repo, src, and webapp. The file "BaseX.jar" is selected.
- Editor:** Displays the XML file "ciclos.xml" with the following content:

```
<ciclo codigo="ASIR">
  <nombre>Administracion de Sistemas
Informaticos en Red</nombre>
  <grado>Superior</grado>
</ciclo>
<ciclo codigo="DAM">
  <nombre>Desarrollo de Aplicaciones
Multiplataforma</nombre>
  <grado>Superior</grado>
</ciclo>
<ciclo codigo="DAW">
  <nombre>Desarrollo de Aplicaciones Web</nombre>
  <grado>Superior</grado>
</ciclo>
```
- Tree View:** Shows the XML structure with the following elements:
 - ciclos.xml
 - ciclos
 - ciclo
 - ciclo
 - ciclo
 - ciclo
- Result Pane:** Displays the query results for the query "ciclos[grado = 'Superior']". It shows 3 results, 405 b. The results are displayed in a table format with columns for the XML elements and their values.
- Info Pane:** Provides details about the query execution, including the result set size (3 items), the number of items updated (0), the number of items printed (405 b), and the read and write locking status.

file* [ciclos] - BaseX 11.9

Database Editor View Visualization Options Help

Find //ciclo[starts-with(@codigo, "DA")] 2 Results

Editor: 1

Result: 2 Results, 262 b

```

<ciclo codigo="DA">
  <nombre>Desarrollo de Aplicaciones
Multiplataforma</nombre>
  <grado>Superior</grado>
</ciclo>
<ciclo codigo="DAW">
  <nombre>Desarrollo de Aplicaciones Web</nombre>
  <grado>Superior</grado>
</ciclo>

```

Info

Result:

- Hit(s): 2 Items
- Updated: 0 Items
- Printed: 262 b
- Read Locking: ciclos
- Write Locking: (none)

Optimized Query:

db:get-pre("ciclos", 0)/*:ciclos/*:ciclo[starts-with(@codigo, "DA")]

Optimizing:

- rewrite context value: . -> db:get-pre("ciclos", 0)

file* [ciclos] - BaseX 11.9

Database Editor View Visualization Options Help

Find //ciclo[position()>2] 2 Results

Editor: 1

Result: 2 Results, 251 b

```

<ciclo codigo="DAW">
  <nombre>Desarrollo de Aplicaciones Web</nombre>
  <grado>Superior</grado>
</ciclo>
<ciclo codigo="SMR">
  <nombre>Sistemas Microinformaticos y Redes</nombre>
  <grado>Medio</grado>
</ciclo>

```

Info

Result:

- Hit(s): 2 Items
- Updated: 0 Items
- Printed: 251 b
- Read Locking: ciclos
- Write Locking: (none)

Optimized Query:

db:get-pre("ciclos", 0)/descendant-or-self::node()/ciclo[fn:position() >= 3]

Optimizing:

- rewrite context value: . -> db:get-pre("ciclos", 0)
- rewrite util:fn:node() -> util:fn:node() db:get-pre("ciclos", 0) >= 3]

The screenshot displays the BaseX 11.9 application window. The top menu bar includes Database, Editor, View, Visualization, Options, and Help. Below the menu is a toolbar with various icons for file operations and editing. The main workspace is divided into several panels:

- Left Panel (File Explorer):** Shows the file system structure starting from 'C:\'. The 'baseX' directory is expanded, showing subdirectories like 'bin', 'data', 'etc', 'lib', 'repo', 'src', and 'webapp'. The 'BaseX.jar' file is highlighted.
- Editor Panel:** Displays the content of the selected file, 'ciclos.xml'. The XML content is:


```
<ciclo codigo="ASIR">
  <nombre>Administracion de Sistemas
  Informaticos en Red</nombre>
  <grado>Superior</grado>
</ciclo>
```
- Explorer Panel:** Shows the tree structure of the 'ciclos.xml' file, with 'ciclos' as the root element and 'ciclo' as its child.
- Result Panel:** Displays the query result for the XPath expression '//ciclo[position()<2]'. The result is a table with 1 row and 1 column, showing the first 'ciclo' element. The XML snippet is:


```
<ciclo codigo="ASIR">
  <nombre>Administracion de Sistemas
  Informaticos en Red</nombre>
  <grado>Superior</grado>
</ciclo>
```

The status bar at the bottom indicates '1 Result, 141 b' and 'Total Time: 1.28 ms'.