

```
1. /EMPLEADOS/EMP_ROW[position()=last()-1]/APELLIDO/text()
```

```
3 /EMPLEADOS/EMP_ROW[position()=last()-1]/APELLIDO/text()
```

__new__ 1

Adaptive Output ☒ Indent ☐ Live Preview ☒ Highlight

1 FERNANDEZ

```
1. /EMPLEADOS/EMP_ROW[position()=3]
```

new-document 1* departamentos... productos.xml empleados.xml

```
1 xquery version "3.1";  
2  
3 /EMPLEADOS/EMP_ROW[position()=3]
```

__new__ 1

Adaptive Output ☒ Indent ☐ Live Preview ☒ Highlight Index Ma

```
1 <EMP_ROW>  
  <EMP_NO>7521</EMP_NO>  
  <APELLIDO>SALA</APELLIDO>  
  <OFICIO>VENDEDOR</OFICIO>  
  <DIR>7698</DIR>  
  <FECHA_ALT>1991-02-22</FECHA_ALT>  
  <SALARIO>1625</SALARIO>  
  <COMISION>650</COMISION>  
  <DEPT_NO>30</DEPT_NO>  
</EMP_ROW>
```

```
1. count (/EMPLEADOS/EMP_ROW[DEPT_NO=10])
```

The screenshot shows an XML editor with four tabs: 'new-document 1*', 'departamentos...', 'productos.xml', and 'empleados.xml'. The 'new-document 1*' tab is active, displaying an XQuery script. The script consists of three lines: line 1 is 'xquery version "3.1";', line 2 is empty, and line 3 is 'count (/EMPLEADOS/EMP_ROW[DEPT_NO=10])'. The editor has a light gray background with line numbers on the left. Below the editor, there is a toolbar with a double left arrow, a dropdown menu set to 'Adaptive Output', and three checkboxes: 'Indent' (checked), 'Live Preview' (unchecked), and 'Highlight Index' (checked). At the bottom left, the output area shows '1 3'.

```
new-document 1*  departamentos...  productos.xml  empleados.xml
```

```
1  xquery version "3.1";
```

```
2
```

```
3  count (/EMPLEADOS/EMP_ROW[DEPT_NO=10])
```

```
__new__1
```

Adaptive Output Indent Live Preview Highlight Index

```
1 3
```

```
1. sum (/EMPLEADOS/EMP_ROW[DEPT_NO=20]/SALARIO)
```

The screenshot shows the same XML editor with the same tabs. The 'new-document 1*' tab is active, displaying an XQuery script. The script consists of three lines: line 1 is 'xquery version "3.1";', line 2 is empty, and line 3 is 'sum (/EMPLEADOS/EMP_ROW[DEPT_NO=20]/SALARIO)'. The editor has a light gray background with line numbers on the left. Below the editor, there is a toolbar with a double left arrow, a dropdown menu set to 'Adaptive Output', and three checkboxes: 'Indent' (checked), 'Live Preview' (unchecked), and 'Highlight Index' (checked). At the bottom left, the output area shows '1 1.137e4'.

```
new-document 1*  departamentos...  productos.xml  empleados.xml
```

```
1  xquery version "3.1";
```

```
2
```

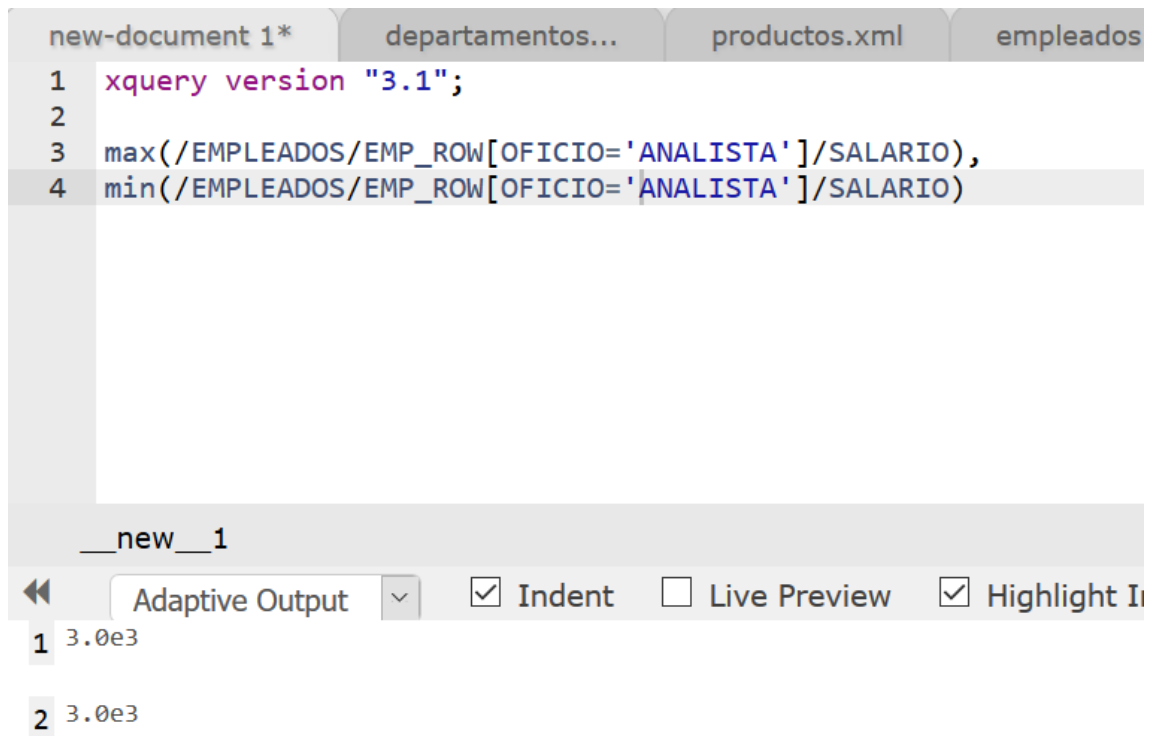
```
3  sum (/EMPLEADOS/EMP_ROW[DEPT_NO=20]/SALARIO)
```

```
__new__1
```

Adaptive Output Indent Live Preview Highlight Index

```
1 1.137e4
```

```
1. max (/EMPLEADOS/EMP_ROW[OFICIO='ANALISTA']/SALARIO),
2. min (/EMPLEADOS/EMP_ROW[OFICIO='ANALISTA']/SALARIO)
```



The screenshot shows the XMLSpy interface with tabs for 'new-document 1*', 'departamentos...', 'productos.xml', and 'empleados'. The editor contains the following XQuery:

```
1 xquery version "3.1";
2
3 max (/EMPLEADOS/EMP_ROW[OFICIO='ANALISTA']/SALARIO),
4 min (/EMPLEADOS/EMP_ROW[OFICIO='ANALISTA']/SALARIO)
```

The results pane at the bottom shows two values:

```
1 3.0e3
2 3.0e3
```

The interface includes a toolbar with options: 'Adaptive Output' (dropdown), 'Indent' (checked), 'Live Preview' (unchecked), and 'Highlight Index Match' (checked).

```
1. avg (/EMPLEADOS/EMP_ROW[DEPT_NO=10]/SALARIO)
```



The screenshot shows the XMLSpy interface with tabs for 'new-document 1*', 'departamentos...', 'productos.xml', and 'empleados.xml'. The editor contains the following XQuery:

```
1 xquery version "3.1";
2
3 avg (/EMPLEADOS/EMP_ROW[DEPT_NO=10]/SALARIO)
```

The results pane at the bottom shows a single value:

```
1 2.89166666666666665e3
```

The interface includes a toolbar with options: 'Adaptive Output' (dropdown), 'Indent' (checked), 'Live Preview' (unchecked), and 'Highlight Index Match' (checked).

```
1. /EMPLEADOS/EMP_ROW/concat(APELLIDO, OFICIO, SALARIO)
```

The screenshot shows an XML editor with three tabs: 'departamentos...', 'productos.xml', and 'empleados.xml'. The active tab is 'empleados.xml'. The editor contains the following code:

```
1 xquery version "3.1";  
2  
3 /EMPLEADOS/EMP_ROW/concat(APELLIDO, OFICIO, SALARIO)
```

Below the editor, there is a toolbar with the following options: 'Adaptive Output' (selected), 'Indent' (checked), 'Live Preview' (unchecked), and 'Highlight Index Matches' (checked). The results of the query are displayed in a list:

```
1 "SANCHEZEMPLEADO1040"  
2 "ARROYOVENDEDOR1500"  
3 "SALAVENDEDOR1625"  
4 "JIMENEZDIRECTOR2900"  
5 "MARTINVENDEDOR1600"  
6 "NEGRODIRECTOR3005"
```

```
1. /EMPLEADOS/EMP_ROW[starts-with(APELLIDO/text(), "A")]
```

The screenshot shows an XML editor with three tabs: 'departamentos...', 'productos.xml', and 'empleados.xml'. The active tab is 'empleados.xml'. The editor contains the following code:

```
1 xquery version "3.1";  
2  
3 /EMPLEADOS/EMP_ROW[starts-with(APELLIDO/text(), "A")]
```

Below the editor, there is a toolbar with the following options: 'Adaptive Output' (selected), 'Indent' (checked), 'Live Preview' (unchecked), and 'Highlight Index Matches' (checked). The results of the query are displayed in a list:

```
1 <EMP_ROW>  
  <EMP_NO>7499</EMP_NO>  
  <APELLIDO>ARROYO</APELLIDO>  
  <OFICIO>VENDEDOR</OFICIO>  
  <DIR>7698</DIR>  
  <FECHA_ALT>1990-02-20</FECHA_ALT>  
  <SALARIO>1500</SALARIO>  
  <COMISION>390</COMISION>  
  <DEPT_NO>30</DEPT_NO>  
</EMP_ROW>  
2 <EMP_ROW>
```

```
1. /EMPLEADOS/EMP_ROW[contains(OFICIO/text(), "OR")]/OFICIO
```

The screenshot shows the XMLSpy interface with the 'empleados.xml' file open. The XPath query `/EMPLEADOS/EMP_ROW[contains(OFICIO/text(), "OR")]/OFICIO` is entered in the top pane. The bottom pane, titled '__new__1', displays the results of the query, which are four XML elements: `<OFICIO>VENDEDOR</OFICIO>`, `<OFICIO>VENDEDOR</OFICIO>`, `<OFICIO>DIRECTOR</OFICIO>`, and `<OFICIO>VENDEDOR</OFICIO>`. The interface includes tabs for 'new-document 1*', 'departamentos...', 'productos.xml', and 'empleados.xml'. The bottom toolbar has options for 'Adaptive Output', 'Indent' (checked), 'Live Preview' (unchecked), and 'Highlight Index Match' (checked).

```
new-document 1*  departamentos...  productos.xml  empleados.xml
```

```
1 xquery version "3.1";
```

```
2
```

```
3 /EMPLEADOS/EMP_ROW[contains(OFICIO/text(), "OR")]/OFICIO
```

```
__new__1
```

```
<< Adaptive Output Indent Live Preview Highlight Index Match
```

```
1 <OFICIO>VENDEDOR</OFICIO>
```

```
2 <OFICIO>VENDEDOR</OFICIO>
```

```
3 <OFICIO>DIRECTOR</OFICIO>
```

```
4 <OFICIO>VENDEDOR</OFICIO>
```

```
1. /EMPLEADOS/EMP_ROW[string-length(APELLIDO/text())<4]
```

The screenshot shows the XMLSpy interface with the 'empleados.xml' file open. The XPath query `/EMPLEADOS/EMP_ROW[string-length(APELLIDO/text()) < 4]` is entered in the top pane. The bottom pane, titled '__new__1', displays the results of the query, which are two XML elements: `<EMP_ROW>` and `<EMP_ROW>`. The first element is expanded, showing its child elements: `<EMP_NO>7788</EMP_NO>`, `<APELLIDO>GIL</APELLIDO>`, `<OFICIO>ANALISTA</OFICIO>`, `<DIR>7566</DIR>`, `<FECHA_ALT>1991-11-09</FECHA_ALT>`, `<SALARIO>3000</SALARIO>`, and `<DEPT_NO>20</DEPT_NO>`. The interface includes tabs for 'new-document 1*', 'departamentos...', 'productos.xml', and 'empleados.xml'. The bottom toolbar has options for 'Adaptive Output', 'Indent' (checked), 'Live Preview' (unchecked), and 'Highlight Index Match' (checked). A tooltip is visible over the first result element, stating 'Indent results; effective only in Adaptive, JSON, (X)HTML, and'.

```
new-document 1*  departamentos...  productos.xml  empleados.xml
```

```
1 xquery version "3.1";
```

```
2
```

```
3 /EMPLEADOS/EMP_ROW[string-length(APELLIDO/text()) < 4]
```

```
__new__1
```

```
<< Adaptive Output Indent Live Preview Highlight Index Match
```

```
1 <EMP_ROW>
```

```
  <EMP_NO>7788</EMP_NO>
```

```
  <APELLIDO>GIL</APELLIDO>
```

```
    <OFICIO>ANALISTA</OFICIO>
```

```
    <DIR>7566</DIR>
```

```
    <FECHA_ALT>1991-11-09</FECHA_ALT>
```

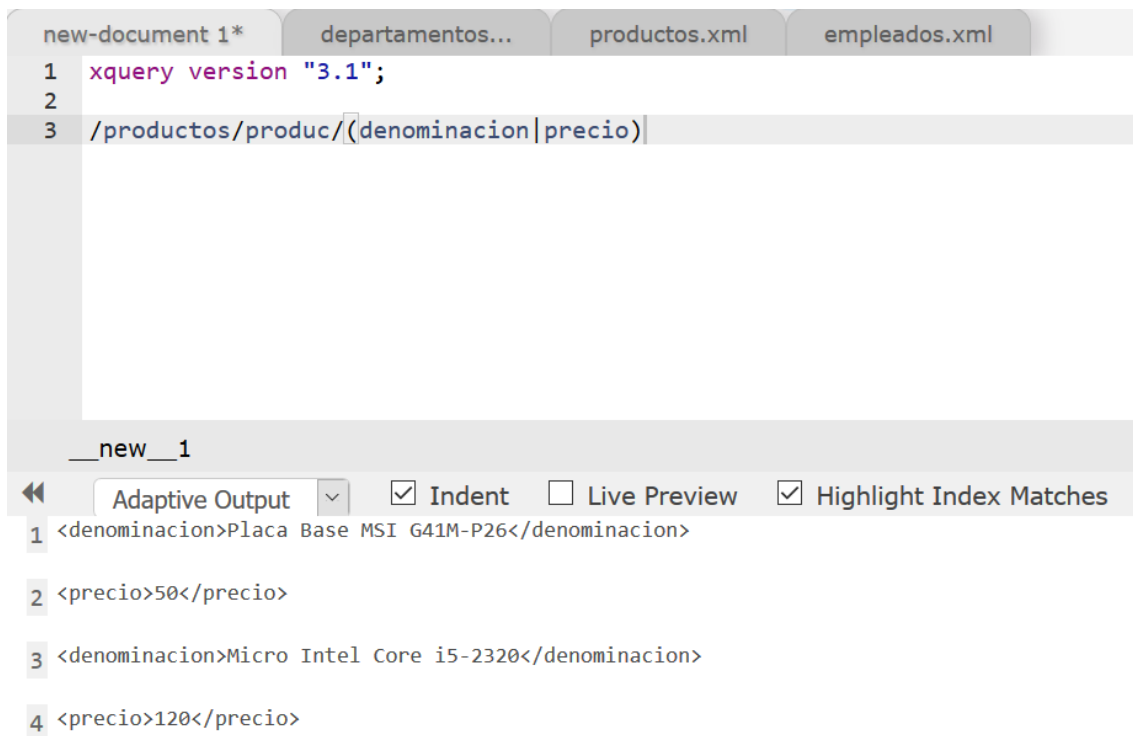
```
    <SALARIO>3000</SALARIO>
```

```
    <DEPT_NO>20</DEPT_NO>
```

```
  </EMP_ROW>
```

```
2 <EMP_ROW>
```

```
1. /productos/produc/(denominacion|precio)
```



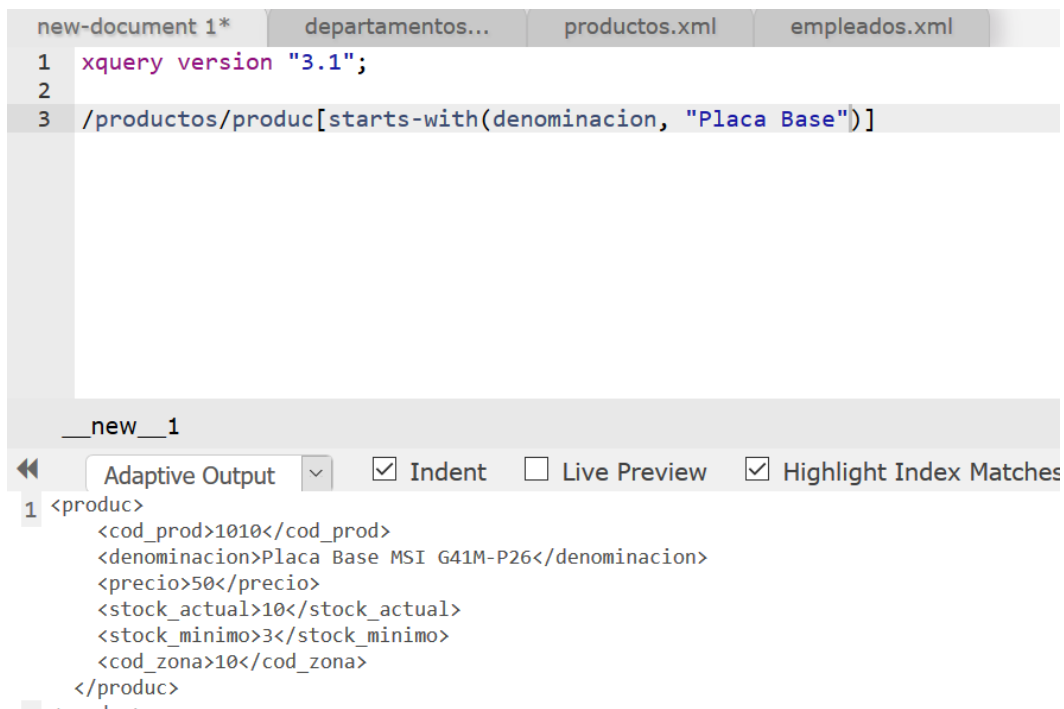
The screenshot shows the XMLSpy interface with a tab labeled 'productos.xml'. The XQuery editor contains the following code:

```
1 xquery version "3.1";  
2  
3 /productos/produc/(denominacion|precio)
```

The result pane, titled '__new__1', displays the output of the query. It shows four matches, each consisting of an opening and closing XML tag:

```
1 <denominacion>Placa Base MSI G41M-P26</denominacion>  
2 <precio>50</precio>  
3 <denominacion>Micro Intel Core i5-2320</denominacion>  
4 <precio>120</precio>
```

```
1. /productos/produc[starts-with(denominacion, "Placa Base")]
```



The screenshot shows the XMLSpy interface with a tab labeled 'productos.xml'. The XQuery editor contains the following code:

```
1 xquery version "3.1";  
2  
3 /productos/produc[starts-with(denominacion, "Placa Base")]
```

The result pane, titled '__new__1', displays the output of the query. It shows a single match, which is a full XML element containing multiple sub-elements:

```
1 <produc>  
  <cod_prod>1010</cod_prod>  
  <denominacion>Placa Base MSI G41M-P26</denominacion>  
  <precio>50</precio>  
  <stock_actual>10</stock_actual>  
  <stock_minimo>3</stock_minimo>  
  <cod_zona>10</cod_zona>  
</produc>
```

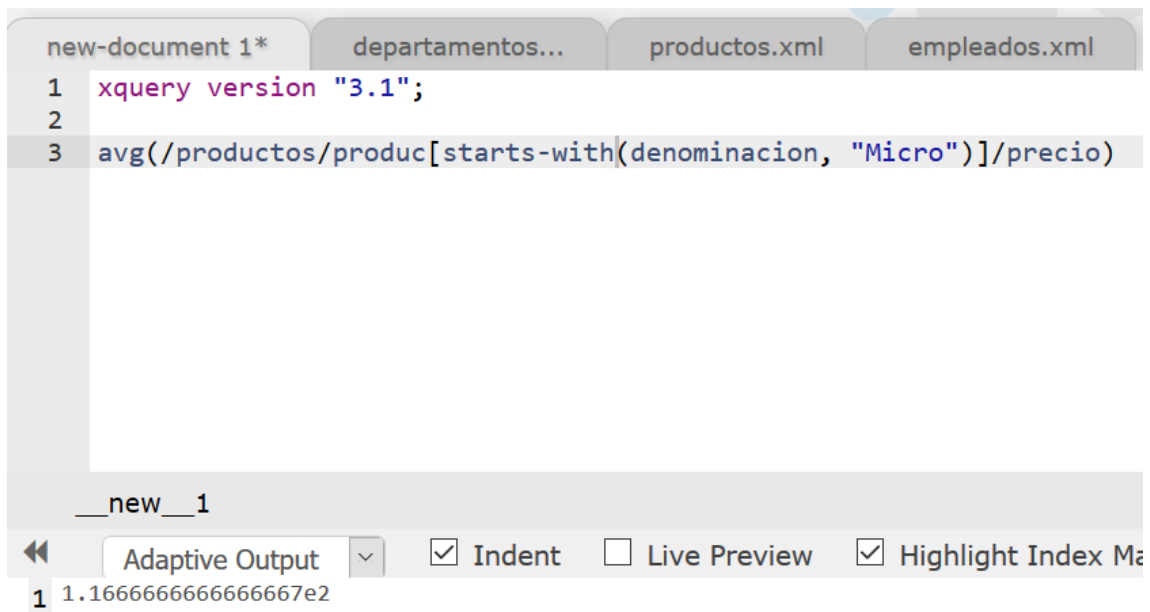
```
1. /productos/produc[precio>60 and cod_zona=20]
```

The screenshot shows an XML editor with four tabs: 'new-document 1*', 'departamentos...', 'productos.xml', and 'empleados.xml'. The 'productos.xml' tab is active, displaying an XPath query on line 3: `/productos/produc[precio>60 and cod_zona=20]`. Below the editor, a toolbar includes a back arrow, a dropdown menu set to 'Adaptive Output', and checkboxes for 'Indent' (checked), 'Live Preview' (unchecked), and 'Highlight Index Mat' (checked). The output area shows the XML result of the query on line 1: `<produc>`, followed by indented elements: `<cod_prod>1012</cod_prod>`, `<denominacion>Micro Intel Core i5 2500</denominacion>`, `<precio>170</precio>`, `<stock_actual>5</stock_actual>`, `<stock_minimo>6</stock_minimo>`, and `<cod_zona>20</cod_zona>`, ending with `</produc>`.

```
1. /productos/produc[starts-with(denominacion, "Memoria") and  
cod_zona=10]
```

The screenshot shows an XML editor with a single tab 'new-document 1'. The editor displays an XPath query on line 3: `count(/productos/produc[starts-with(denominacion, "Memoria") and cod_zona=10])`. Below the editor, a toolbar includes a back arrow, a dropdown menu set to 'Adaptive Output', and checkboxes for 'Indent' (checked), 'Live Preview' (unchecked), and 'Highlight Index Matches' (checked). The output area shows the result of the query on line 1: the number '2'.

```
1. Avg (/productos/produc[starts-with(denominacion,
"Micro")]/precio)
```



The screenshot shows the XMLSpy interface with a tab labeled 'productos.xml'. The editor contains the following XQuery:

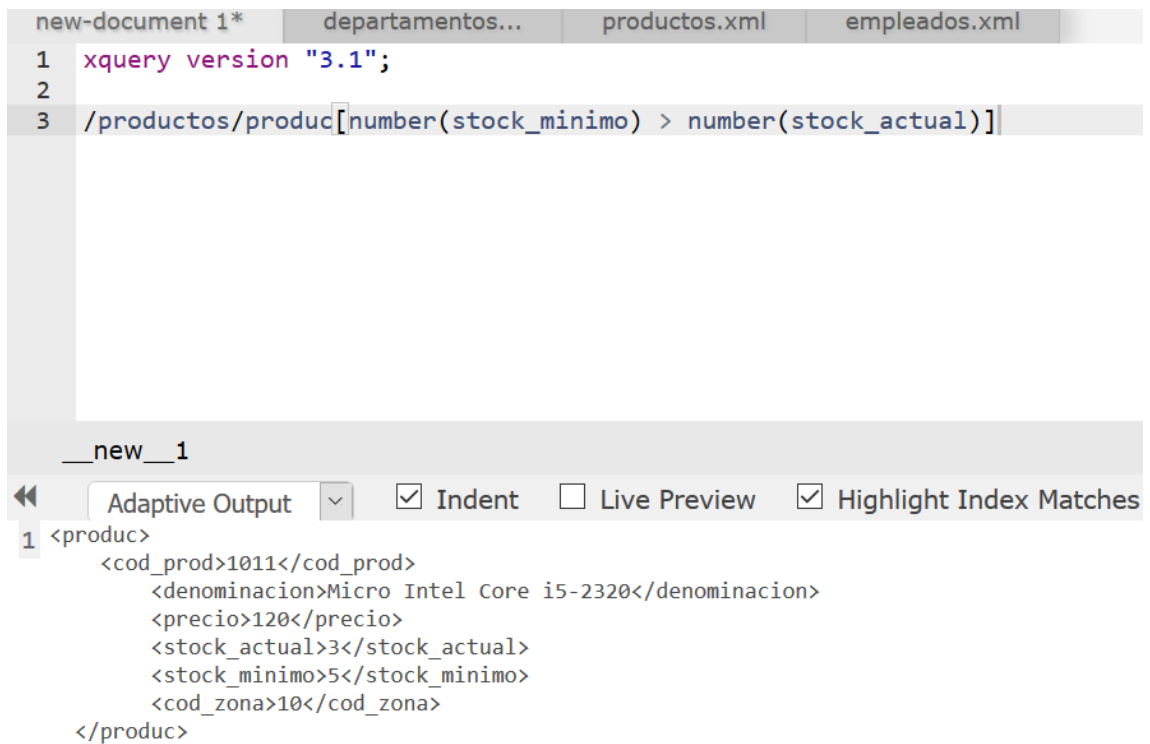
```
1 xquery version "3.1";
2
3 avg(/productos/produc[starts-with(denominacion, "Micro")]/precio)
```

Below the editor, the 'Output' pane shows the result of the query:

```
1 1.1666666666666667e2
```

The interface includes a toolbar with options: 'Adaptive Output' (selected), 'Indent' (checked), 'Live Preview' (unchecked), and 'Highlight Index Matches' (checked).

```
1. /productos/produc[number(stock_minimo) > number(stock_actual)]
```



The screenshot shows the XMLSpy interface with a tab labeled 'productos.xml'. The editor contains the following XQuery:

```
1 xquery version "3.1";
2
3 /productos/produc[number(stock_minimo) > number(stock_actual)]
```

Below the editor, the 'Output' pane shows the result of the query:

```
1 <produc>
  <cod_prod>1011</cod_prod>
  <denominacion>Micro Intel Core i5-2320</denominacion>
  <precio>120</precio>
  <stock_actual>3</stock_actual>
  <stock_minimo>5</stock_minimo>
  <cod_zona>10</cod_zona>
</produc>
```

The interface includes a toolbar with options: 'Adaptive Output' (selected), 'Indent' (checked), 'Live Preview' (unchecked), and 'Highlight Index Matches' (checked).


```
1. /productos/produc[precio = max(precio)]
```

```
new-document 1*  departamentos...  productos.xml  empleados...
1  xquery version "3.1";
2
3  /productos/produc[precio = max(precio)]

__new__ 1
Adaptive Output  Indent  Live Preview  Highlight In
1 <produc>
  <cod_prod>1012</cod_prod>
  <denominacion>Micro Intel Core i5 2500</denominacion>
  <precio>170</precio>
  <stock_actual>5</stock_actual>
  <stock_minimo>6</stock_minimo>
  <cod_zona>20</cod_zona>
</produc>
```

```
1. /productos/produc[cod_zona=20 and precio = min(precio)]
```

```
new-document 1*  departamentos...  productos.xml  emplead...
1  xquery version "3.1";
2
3  /productos/produc[cod_zona=20 and precio = min(precio)]

__new__ 1
Adaptive Output  Indent  Live Preview  Highlight In
1 <produc>
  <cod_prod>1021</cod_prod>
  <denominacion>Memoria DDR3 Kingston HyperX 4GB</denominacion>
  <precio>16</precio>
  <stock_actual>15</stock_actual>
  <stock_minimo>4</stock_minimo>
  <cod_zona>20</cod_zona>
</produc>
```