

## Ficha Prática 4

### Exe 3.1) Todos os cds lançados entre 1980 e 1990, ordenados pelo ano de lançamento

The screenshot shows the XML Editor interface with the file `cd_catalog.xml` open. The XML content is as follows:

```
<?xml version="1.0" encoding="UTF-8" ?>
<CATALOG>
  <CD>
    <TITLE>Empire Burlesque</TITLE>
    <ARTIST>Bob Dylan</ARTIST>
    <COUNTRY>USA</COUNTRY>
    <COMPANY>Columbia</COMPANY>
    <PRICE>10.90</PRICE>
    <YEAR>1985</YEAR>
  </CD>
  <CD>
    <TITLE>Hide your heart</TITLE>
    <ARTIST>Bonnie Tylor</ARTIST>
    <COUNTRY>UK</COUNTRY>
  </CD>
</CATALOG>
```

The XQuery Builder shows the following query:

```
1 <CATALOG>
2 {
3   for $cd in doc("cd_catalog.xml")/CATALOG/CD
4   where $cd/YEAR >= 1980 and $cd/YEAR <= 1990
5   order by $cd/YEAR
6   return
7     <CD>
8       <TITLE> { $cd/TITLE/text() } </TITLE>
9       <ARTIST> { $cd/ARTIST/text() } </ARTIST>
10      <COUNTRY> { $cd/COUNTRY/text() } </COUNTRY>
11      <COMPANY> { $cd/COMPANY/text() } </COMPANY>
12      <PRICE> { $cd/PRICE/text() } </PRICE>
13      <YEAR> { $cd/YEAR/text() } </YEAR>
14    </CD>
15 }
16 </CATALOG>
```

The Results pane displays the output of the query:

```
(N) 1. CATALOG
2 <CD>
3   <TITLE>Greatest Hits</TITLE>
4   <ARTIST>Dolly Parton</ARTIST>
5   <COUNTRY>USA</COUNTRY>
6   <COMPANY>RCA</COMPANY>
7   <PRICE>9.90</PRICE>
8   <YEAR>1982</YEAR>
9 </CD>
10 <CD>
11   <TITLE>Greatest Hits</TITLE>
12   <ARTIST>Dolly Parton</ARTIST>
13   <COUNTRY>USA</COUNTRY>
14   <COMPANY>RCA</COMPANY>
15   <PRICE>9.90</PRICE>
16   <YEAR>1982</YEAR>
17 </CD>
18 </CATALOG>
```

### 3.2) O título (Title) e preço (Price) para os CDs dos anos 90

The screenshot shows the XML Editor interface with the file `cd_catalog.xml` open. The XML content is the same as in the previous screenshot.

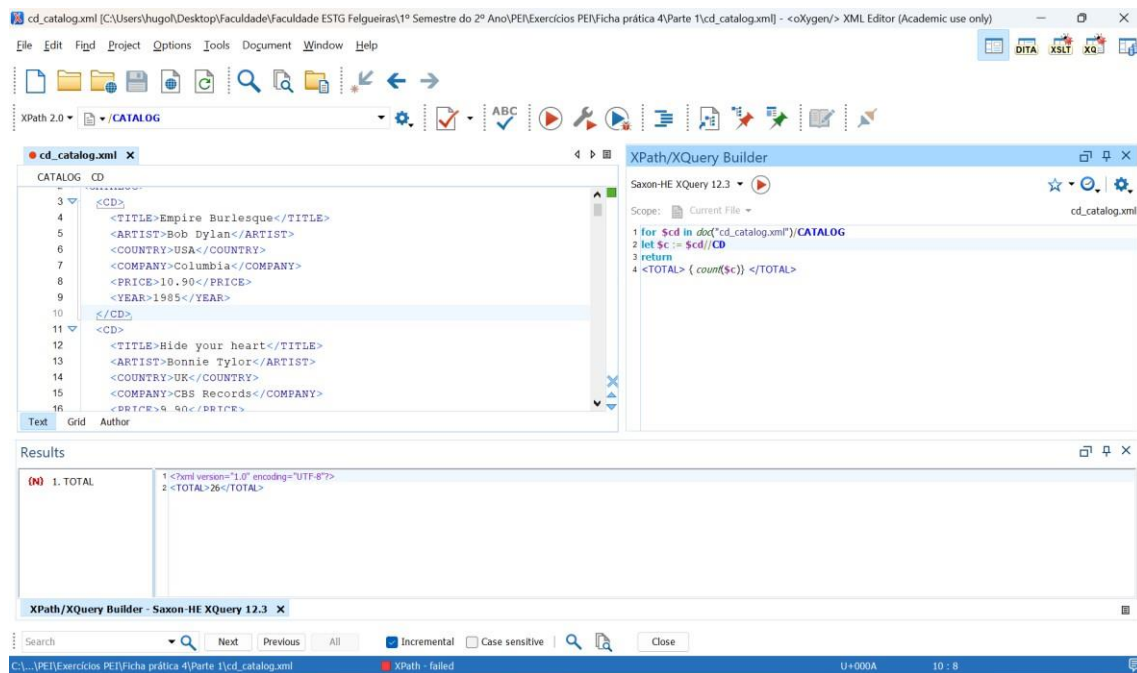
The XQuery Builder shows the following query:

```
1 <CATALOG>
2 {
3   for $cd in doc("cd_catalog.xml")/CATALOG/CD
4   where $cd/YEAR >= 1990 and $cd/YEAR <= 1999
5   order by $cd/YEAR
6   return
7     <CD>
8       <TITLE> { $cd/TITLE/text() } </TITLE>
9       <PRICE> { $cd/PRICE/text() } </PRICE>
10    </CD>
11 }
12 </CATALOG>
```

The Results pane displays the output of the query:

```
(N) 1. CATALOG
2 <CD>
3   <TITLE>Sd got the blues</TITLE>
4   <PRICE>10.20</PRICE>
5 </CD>
6 <CD>
7   <TITLE>Magge May</TITLE>
8   <PRICE>8.50</PRICE>
9 </CD>
10 <CD>
11   <TITLE>The very best of</TITLE>
12   <PRICE>8.90</PRICE>
13 </CD>
14 </CATALOG>
```

### 3.3) Contar o número de CDs armazenados no documento.



### 3.4) A lista de todos os CDs (title, year, price) assim como a “idade” de cada CD (tendo em conta o ano

atual). O resultado deverá ser apresentado utilizando um elemento: <AGE>.

E ainda foi implementado para ficar em ordem anual do menor para o maior.

