

**A partir del XML adjunto (players.xml) resolver las siguientes consultas utilizando XPath y XQuery:**

**Resolver las siguientes consultas utilizando XPath:**

1-Mostrar todos los datos de los jugadores cuya posición principal sea MC.

```
//player[Position="MC"]
```

Elements found: 6

```
1. Timothy Foster Norway 39 MC MCD, MCO, DFC
2. Levi Steele Pakistan 69 MC DC, DFC
3. Matthew Hart Vietnam 15 MC DC, DFC
4. Rebecca Bowman United Kingdom 88 MC
5. Jackson Kidd Poland 41 MC EX
6. Igor Tyson Colombia 27 MC
```

2-Mostrar el nombre de todos los jugadores originarios de Italia.

```
//player[Country="Italy"]
```

Elements found: 2

```
1. Libby Joyce Italy 35 DFC
2. Derek Manning Italy 24 MCO SD, LI
```

3-Mostrar todos los datos de los jugadores cuyo dorsal sea superior al 55.

```
//player[Number>55]
```

Elements found: 24

```
1. Erasmus Wall France 65 SD LD, MC
2. Stephanie Cantrell Netherlands 72 EX
3. Dorian Cantu Brazil 61 SD EX, LI, DC
4. Hall Shannon South Africa 76 DC LI, DC
5. Xandra Fox China 78 DC MC
6. Matthew Tanner Poland 93 MCO MC, EX
7. Herrod Stewart United States 82 DC DFC, LD
8. Caleb Reyes Russian Federation 96 DC EX, DFC
9. Glenna Webb Brazil 67 SD LI, SD, LD
10. Grace Riggs Mexico 69 PT SD, LD
11. Iola Melton Ukraine 80 EX MC, MCD
12. Levi Steele Pakistan 69 MC DC, DFC
13. Azalia Bates United States 69 DFC DFC, LD, DC
14. Quyn Thomas South Africa 89 SD DFC, MCO
15. Barclay Zimmerman China 81 DFC MCO
16. Alden Russo Netherlands 64 MDC
17. Vernon Clay France 80 DFC SD, EX
18. Lucian Price Singapore 84 PT EX, MC, MCD
19. Gail Phillips Russian Federation 66 MCO MC, EX
20. Rebecca Bowman United Kingdom 88 MC
21. Whoopi Emerson Costa Rica 71 DC EX
22. Philip Scott China 71 EX
23. Denton Hendrix Belgium 69 MDC LD
24. Holmes Huffman Austria 64 SD
```

#### 4-Mostrar una lista con las distintas nacionalidades de la plantilla

```
distinct-values(//player/Country)
```

```
UntypedAtomic='France'  
UntypedAtomic='Netherlands'  
UntypedAtomic='Brazil'  
UntypedAtomic='Norway'  
UntypedAtomic='Singapore'  
UntypedAtomic='South Africa'  
UntypedAtomic='China'  
UntypedAtomic='Poland'  
UntypedAtomic='United States'  
UntypedAtomic='Russian Federation'  
UntypedAtomic='Ireland'  
UntypedAtomic='Belgium'  
UntypedAtomic='Nigeria'  
UntypedAtomic='Vietnam'  
UntypedAtomic='Mexico'  
UntypedAtomic='Ukraine'  
UntypedAtomic='Pakistan'  
UntypedAtomic='Italy'  
UntypedAtomic='Chile'  
UntypedAtomic='Spain'  
UntypedAtomic='New Zealand'  
UntypedAtomic='Indonesia'  
UntypedAtomic='India'  
UntypedAtomic='United Kingdom'  
UntypedAtomic='Costa Rica'  
UntypedAtomic='Austria'  
UntypedAtomic='Colombia'
```

#### 5-Mostrar el número total de jugadores de la plantilla

```
count(//player)
```

```
Non-standard output:  
50
```

#### 6-Mostrar el nombre y la nacionalidad de todos los jugadores cuyo nombre comience por “E”.

```
//player[starts-with(Name,"E")]/Name | //player[starts-with(Name,"E")]/Country
```

```
Elements found: 4
```

1. Erasmus Wall
2. France
3. Elmo Simmons
4. Singapore

## Resolver las siguientes consultas utilizando XQuery:

1-Mostrar todos los datos de los jugadores originarios de China, Brasil y Estados Unidos junto con la suma del valor de sus dorsales.

```
let $x :=//player[Country="China" or Country="Brazil" or Country="United States"]
,$tot_dor:=sum($x/Number)

return <players>
{$x}
<suma>{$tot_dor}</suma>
</players>
```

```
32     </player><player>
33         <Name>Isabelle Sweeney</Name>
34         <Country>China</Country>
35         <Number>42</Number>
36         <Position>DFC</Position>
37         <Secondary_Positions>EX</Secondary_Positions>
38     </player><player>
39         <Name>Barclay Zimmerman</Name>
40         <Country>China</Country>
41         <Number>81</Number>
42         <Position>DFC</Position>
43         <Secondary_Positions>MCO</Secondary_Positions>
44     </player><player>
45         <Name>Helen Hardy</Name>
46         <Country>United States</Country>
47         <Number>31</Number>
48         <Position>PT</Position>
49         <Secondary_Positions>DFC, SD</Secondary_Positions>
50     </player><player>
51         <Name>Philip Scott</Name>
52         <Country>China</Country>
53         <Number>71</Number>
54         <Position>EX</Position>
55         <Secondary_Positions/>
56     </player>
57 <suma>582</suma>
58 </players>
59
```

2-Mostrar todos los datos de los jugadores sin posiciones secundarias y dar la salida en formato de tabla con las etiquetas HTML correspondientes

```
<html>
  <table border="1px">
    <tr>
      <th>Nombre</th>
      <th>Pais</th>
      <th>Dorsal</th>
      <th>Posicion</th>
      <th>Posiciones secundarias</th>
    </tr>
    {
for $x in //player[Secondary_Positions=""]
return
      <tr>
        <td>{$x/Name/text()}</td>
        <td>{$x/Country/text()}</td>
        <td>{$x/Number/text()}</td>
        <td>{$x/Position/text()}</td>
        <td>{$x/Secondary_Positions/text()}</td>
      </tr>
    }
  </table>
</html>
```

```
<html>
  <table border="1px">
    <tr>
      <th>Nombre</th>
      <th>Pais</th>
      <th>Dorsal</th>
      <th>Posicion</th>
      <th>Posiciones secundarias</th>
    </tr>
    <tr>
      <td>Stephanie Cantrell</td>
      <td>Netherlands</td>
      <td>72</td>
      <td>EX</td>
      <td></td>
    </tr>
    <tr>
      <td>Nasim Abbott</td>
      <td>Vietnam</td>
      <td>8</td>
      <td>PT</td>
      <td></td>
    </tr>
    <tr>
      <td>Libby Joyce</td>
      <td>Italy</td>
      <td>35</td>
      <td>DFC</td>
      <td></td>
    </tr>
    <tr>
      <td>Beau Dickson</td>
      <td>France</td>
      <td>15</td>
      <td></td>
      <td></td>
    </tr>
```

Nombre	Pais	Dorsal	Posicion	Posiciones secundarias
Stephanie Cantrell	Netherlands	72	EX	
Nasim Abbott	Vietnam	8	PT	
Libby Joyce	Italy	35	DFC	
Beau Dickson	France	15	SD	
Hammett Nieves	Chile	53	EX	
Alden Russo	Netherlands	64	MDC	
Vanna Larson	Indonesia	50	PT	
Rebecca Bowman	United Kingdom	88	MC	
Philip Scott	China	71	EX	
Holmes Huffman	Austria	64	SD	
Igor Tyson	Colombia	27	MC	

3-Mostrar el nombre y las posiciones (tanto principal como secundarias) de todos los jugadores que puedan jugar como MC, MCO, MCD.

```
for $x in //player[contains(Position, "MC") or contains(Secondary_Position, "MC")]
return
<player>
{$x/Name}
{$x/Position}
{$x/Secondary_Positions}
</player>
```

```
<player>
<Name>Timothy Foster</Name>
<Position>MC</Position>
<Secondary_Positions>MCD, MCO, DFC</Secondary_Positions>
</player>
<player>
<Name>Matthew Tanner</Name>
<Position>MCO</Position>
<Secondary_Positions>MC, EX</Secondary_Positions>
</player>
<player>
<Name>Levi Steele</Name>
<Position>MC</Position>
<Secondary_Positions>DC, DFC</Secondary_Positions>
</player>
<player>
<Name>Derek Manning</Name>
<Position>MCO</Position>
<Secondary_Positions>SD, LI</Secondary_Positions>
</player>
<player>
<Name>Dominic Vaughn</Name>
<Position>MCO</Position>
<Secondary_Positions>MC</Secondary_Positions>
</player>
<player>
<Name>Gail Phillips</Name>
<Position>MCO</Position>
<Secondary_Positions>MC, EX</Secondary_Positions>
</player>
```

4-Mostrar el dorsal más alto y el dorsal más bajo entre etiquetas que así los indiquen

```
let $x := //player
let $max :=max($x/Number)
let $min :=min($x/Number)
return
<max_min>
<max>{$max}</max>
<min>{$min}</min>
</max_min>
```

```
1 <max_min>
2 <max>96</max>
3 <min>4</min>
4 </max_min>
5
```