UD 7. Transformación con XSLT

EJERCICIOS

Lenguaje de marcas y sistemas de gestión de la información

1ro CFGS DAW

1. PARTIENDO DEL XML RESUELVE LOS EJERCICIOS

El XML está en el aula virtual y se llama plantas.xml, aquí te muestro un resumen de su estructura:

```xml
<?xml version="1.0" encoding="UTF-8"?>
<?xml-stylesheet type="text/xsl" href="transformacion3-1.xsl"?>
<catalog>
  <plant>
    <common>Bloodroot</common>
    <botanical>Sanguinaria canadensis</botanical>
    <zone>4</zone>
    <light>Mostly Shady</light>
    <price>$2.44</price>
    <availability>031599</availability>
  </plant>
  <plant>
    <common>Columbine</common>
    <botanical>Aquilegia canadensis</botanical>
    <zone>3</zone>
    <light>Mostly Shady</light>
    <price>$9.37</price>
    <availability>030699</availability>
  </plant>
  <plant>
    <common>Marsh Marigold</common>
    <botanical>Caltha palustris</botanical>
    <zone>4</zone>
    <light>Mostly Sunny</light>
    <price>$6.81</price>
    <availability>051799</availability>
  </plant>
  <plant>
    <common>Cowslip</common>
    <botanical>Caltha palustris</botanical>
    <zone>4</zone>
    <light>Mostly Shady</light>
    <price>$9.90</price>
    <availability>030699</availability>
  </plant>
  <plant>
    <common>Dutchman's-Breeches</common>
    <botanical>Diecentra cucullaria</botanical>
    <zone>3</zone>
```

```
      <light>Mostly Shady</light>
      <price>$6.44</price>
      <availability>012099</availability>
    </plant>
    <plant>
      <common>Ginger, Wild</common>
      <botanical>Asarum canadense</botanical>
      <zone>3</zone>
      <light>Mostly Shady</light>
      <price>$9.03</price>
      <availability>041899</availability>
    </plant>
    <plant>
      <common>Hepatica</common>
      <botanical>Hepatica americana</botanical>
      <zone>4</zone>
      <light>Mostly Shady</light>
      <price>$4.45</price>
      <availability>012699</availability>
    </plant>
    <plant>
      <common>Liverleaf</common>
      <botanical>Hepatica americana</botanical>
      <zone>4</zone>
      <light>Mostly Shady</light>
      <price>$3.99</price>
      <availability>010299</availability>
    </plant>
    <plant>
      <common>Jack-In-The-Pulpit</common>
      <botanical>Arisaema triphyllum</botanical>
      <zone>4</zone>
      <light>Mostly Shady</light>
      <price>$3.23</price>
      <availability>020199</availability>
    </plant>
    <plant>
      <common>Mayapple</common>
      <botanical>Podophyllum peltatum</botanical>
      <zone>3</zone>
      <light>Mostly Shady</light>
      <price>$2.98</price>
      <availability>060599</availability>
    </plant>
    <plant>
      <common>Phlox, Woodland</common>
      <botanical>Phlox divaricata</botanical>
```

```xml
    <zone>3</zone>
    <light>Sun or Shade</light>
    <price>$2.80</price>
    <availability>012299</availability>
  </plant>
  <plant>
    <common>Phlox, Blue</common>
    <botanical>Phlox divaricata</botanical>
    <zone>3</zone>
    <light>Sun or Shade</light>
    <price>$5.59</price>
    <availability>021699</availability>
  </plant>
  <plant>
    <common>Spring-Beauty</common>
    <botanical>Claytonia Virginica</botanical>
    <zone>7</zone>
    <light>Mostly Shady</light>
    <price>$6.59</price>
    <availability>020199</availability>
  </plant>
  <plant>
    <common>Trillium</common>
    <botanical>Trillium grandiflorum</botanical>
    <zone>5</zone>
    <light>Sun or Shade</light>
    <price>$3.90</price>
    <availability>042999</availability>
  </plant>
  <plant>
    <common>Wake Robin</common>
    <botanical>Trillium grandiflorum</botanical>
    <zone>5</zone>
    <light>Sun or Shade</light>
    <price>$3.20</price>
    <availability>022199</availability>
  </plant>
  <plant>
    <common>Violet, Dog-Tooth</common>
    <botanical>Erythronium americanum</botanical>
    <zone>4</zone>
    <light>Shade</light>
    <price>$9.04</price>
    <availability>020199</availability>
  </plant>
  <plant>
    <common>Trout Lily</common>
```

```
   <botanical>Erythronium americanum</botanical>
   <zone>4</zone>
   <light>Shade</light>
   <price>$6.94</price>
   <availability>032499</availability>
  </plant>
  <plant>
   <common>Adder's-Tongue</common>
   <botanical>Erythronium americanum</botanical>
   <zone>4</zone>
   <light>Shade</light>
   <price>$9.58</price>
   <availability>041399</availability>
  </plant>
  <plant>
   <common>Anemone</common>
   <botanical>Anemone blanda</botanical>
   <zone>6</zone>
   <light>Mostly Shady</light>
   <price>$8.86</price>
   <availability>122698</availability>
  </plant>
  <plant>
   <common>Grecian Windflower</common>
   <botanical>Anemone blanda</botanical>
   <zone>6</zone>
   <light>Mostly Shady</light>
   <price>$9.16</price>
   <availability>071099</availability>
  </plant>
  <plant>
   <common>Bee Balm</common>
   <botanical>Monarda didyma</botanical>
   <zone>4</zone>
   <light>Shade</light>
   <price>$4.59</price>
   <availability>050399</availability>
  </plant>
  <plant>
   <common>Bergamont</common>
   <botanical>Monarda didyma</botanical>
   <zone>4</zone>
   <light>Shade</light>
   <price>$7.16</price>
   <availability>042799</availability>
  </plant>
  <plant>
```

```
   <common>Black-Eyed Susan</common>
   <botanical>Rudbeckia hirta</botanical>
   <zone>Annual</zone>
   <light>Sunny</light>
   <price>$9.80</price>
   <availability>061899</availability>
  </plant>
  <plant>
   <common>Buttercup</common>
   <botanical>Ranunculus</botanical>
   <zone>4</zone>
   <light>Shade</light>
   <price>$2.57</price>
   <availability>061099</availability>
  </plant>
  <plant>
   <common>Crowfoot</common>
   <botanical>Ranunculus</botanical>
   <zone>4</zone>
   <light>Shade</light>
   <price>$9.34</price>
   <availability>040399</availability>
  </plant>
  <plant>
   <common>Butterfly Weed</common>
   <botanical>Asclepias tuberosa</botanical>
   <zone>Annual</zone>
   <light>Sunny</light>
   <price>$2.78</price>
   <availability>063099</availability>
  </plant>
  <plant>
   <common>Cinquefoil</common>
   <botanical>Potentilla</botanical>
   <zone>Annual</zone>
   <light>Shade</light>
   <price>$7.06</price>
   <availability>052599</availability>
  </plant>
  <plant>
   <common>Primrose</common>
   <botanical>Oenothera</botanical>
   <zone>3 – 5</zone>
   <light>Sunny</light>
   <price>$6.56</price>
   <availability>013099</availability>
  </plant>
```

```xml
<plant>
  <common>Gentian</common>
  <botanical>Gentiana</botanical>
  <zone>4</zone>
  <light>Sun or Shade</light>
  <price>$7.81</price>
  <availability>051899</availability>
</plant>
<plant>
  <common>Blue Gentian</common>
  <botanical>Gentiana</botanical>
  <zone>4</zone>
  <light>Sun or Shade</light>
  <price>$8.56</price>
  <availability>050299</availability>
</plant>
<plant>
  <common>Jacob's Ladder</common>
  <botanical>Polemonium caeruleum</botanical>
  <zone>Annual</zone>
  <light>Shade</light>
  <price>$9.26</price>
  <availability>022199</availability>
</plant>
<plant>
  <common>Greek Valerian</common>
  <botanical>Polemonium caeruleum</botanical>
  <zone>Annual</zone>
  <light>Shade</light>
  <price>$4.36</price>
  <availability>071499</availability>
</plant>
<plant>
  <common>California Poppy</common>
  <botanical>Eschscholzia californica</botanical>
  <zone>Annual</zone>
  <light>Sun</light>
  <price>$7.89</price>
  <availability>032799</availability>
</plant>
<plant>
  <common>Shooting Star</common>
  <botanical>Dodecatheon</botanical>
  <zone>Annual</zone>
  <light>Mostly Shady</light>
  <price>$8.60</price>
  <availability>051399</availability>
```

```xml
    </plant>
    <plant>
      <common>Snakeroot</common>
      <botanical>Cimicifuga</botanical>
      <zone>Annual</zone>
      <light>Shade</light>
      <price>$5.63</price>
      <availability>071199</availability>
    </plant>
    <plant>
      <common>Cardinal Flower</common>
      <botanical>Lobelia cardinalis</botanical>
      <zone>2</zone>
      <light>Shade</light>
      <price>$3.02</price>
      <availability>022299</availability>
    </plant>
</catalog>
```

2. GENERA LOS XSL PARA OBTENER LAS SIGUIENTES SOLUCIONES:

2.1 Lista en formato tabla todas las plantas como en la imagen

Common	Botanical
Bloodroot	Sanguinaria canadensis
Columbine	Aquilegia canadensis
Marsh Marigold	Caltha palustris
Cowslip	Caltha palustris
Dutchman's-Breeches	Diecentra cucullaria
Ginger, Wild	Asarum canadense
Hepatica	Hepatica americana
Liverleaf	Hepatica americana
Jack-In-The-Pulpit	Arisaema triphyllum
Mayapple	Podophyllum peltatum
Phlox, Woodland	Phlox divaricata
Phlox, Blue	Phlox divaricata
Spring-Beauty	Claytonia Virginica
Trillium	Trillium grandiflorum
Wake Robin	Trillium grandiflorum
Violet, Dog-Tooth	Erythronium americanum
Trout Lily	Erythronium americanum
Adder's-Tongue	Erythronium americanum
Anemone	Anemone blanda
Grecian Windflower	Anemone blanda
Bee Balm	Monarda didyma
Bergamont	Monarda didyma
Black-Eyed Susan	Rudbeckia hirta
Buttercup	Ranunculus
Crowfoot	Ranunculus
Butterfly Weed	Asclepias tuberosa
Cinquefoil	Potentilla
Primrose	Oenothera
Gentian	Gentiana
Blue Gentian	Gentiana
Jacob's Ladder	Polemonium caeruleum
Greek Valerian	Polemonium caeruleum
California Poppy	Eschscholzia californica
Shooting Star	Dodecatheon
Snakeroot	Cimicifuga
Cardinal Flower	Lobelia cardinalis

2.2   Genera el documento xsl para obtener, plantas con precio $2.44

My Plants

Common	Botanical
Black-Eyed Susan	Rudbeckia hirta
Butterfly Weed	Asclepias tuberosa
Primrose	Oenothera

2.3   Genera el documento xsl para obtener las plantas de la zona 4

My Plants

Common	Botanical	Price	Zone
Bloodroot	Sanguinaria canadensis	$2.44	4
Marsh Marigold	Caltha palustris	$6.81	4
Cowslip	Caltha palustris	$9.90	4
Hepatica	Hepatica americana	$4.45	4
Liverleaf	Hepatica americana	$3.99	4
Jack-In-The-Pulpit	Arisaema triphyllum	$3.23	4
Violet, Dog-Tooth	Erythronium americanum	$9.04	4
Trout Lily	Erythronium americanum	$6.94	4
Adder's-Tongue	Erythronium americanum	$9.58	4
Bee Balm	Monarda didyma	$4.59	4
Bergamont	Monarda didyma	$7.16	4
Buttercup	Ranunculus	$2.57	4
Crowfoot	Ranunculus	$9.34	4
Gentian	Gentiana	$7.81	4
Blue Gentian	Gentiana	$8.56	4

2.4   Genera el documento xsl para obtener las plantas que necesitan ligth de tipo Sunny.

My Plants

Common	Botanical
Black-Eyed Susan	Rudbeckia hirta
Butterfly Weed	Asclepias tuberosa
Primrose	Oenothera

2.5 Genera el documento xsl para obtener las plantas que están en zonas superiores a la 2.

My Plants

Common	Botanical	Zone
Bloodroot	Sanguinaria canadensis	4
Columbine	Aquilegia canadensis	3
Marsh Marigold	Caltha palustris	4
Cowslip	Caltha palustris	4
Dutchman's-Breeches	Diecentra cucullaria	3
Ginger, Wild	Asarum canadense	3
Hepatica	Hepatica americana	4
Liverleaf	Hepatica americana	4
Jack-In-The-Pulpit	Arisaema triphyllum	4
Mayapple	Podophyllum peltatum	3
Phlox, Woodland	Phlox divaricata	3
Phlox, Blue	Phlox divaricata	3
Spring-Beauty	Claytonia Virginica	7
Trillium	Trillium grandiflorum	5
Wake Robin	Trillium grandiflorum	5
Violet, Dog-Tooth	Erythronium americanum	4
Trout Lily	Erythronium americanum	4
Adder's-Tongue	Erythronium americanum	4
Anemone	Anemone blanda	6
Grecian Windflower	Anemone blanda	6
Bee Balm	Monarda didyma	4
Bergamont	Monarda didyma	4
Buttercup	Ranunculus	4
Crowfoot	Ranunculus	4
Gentian	Gentiana	4
Blue Gentian	Gentiana	4