# XQUERY - SEQUENCES

 

Sequences represent an ordered collection of items where items can be of similar or of different types.

## Creating a Sequence

Sequences are created using parenthesis with strings inside quotes or double quotes and numbers as such. XML elements can also be used as the items of a sequence.

## XQuery Expression

```
let $items := ('orange', <apple/>, <fruit type="juicy"/>, <vehicle
type="car">sentro</vehicle>, 1,2,3,'a','b',"abc")
let $count := count($items)
return
<result>
   <count>{$count}</count>

   <items>
      {
      for $item in $items
         return <item>{$item}</item>
      }
   </items>

</result>
```

## Output

```
<result>
   <count>10</count>
   <items>
      <item>orange</item>
      <item>
         <apple/>
      </item>
      <item>
         <fruit type="juicy"/>
      </item>
      <item>
         <vehicle type="car">Sentro</vehicle>
      </item>
      <item>1</item>
      <item>2</item>
      <item>3</item>
      <item>a</item>
      <item>b</item>
      <item>abc</item>
   </items>
</result>
```

## Viewing the Items of a Sequence

Items of a sequence can be iterated one by one, using index or by value. The above example iterated the items of a sequence one by one. Let's see the other two ways in action.

## XQuery Expression *Index*

```
let $items := (1,2,3,4,5,6)
let $count := count($items)
```

```
return
   <result>
      <count>{$count}</count>

      <items>
      {
         for $item in $items[2]
         return <item>{$item}</item>
      }
      </items>

   </result>
```

## Output

```
<result>
   <count>6</count>
   <items>
      <item>2</item>
   </items>
</result>
```

## XQuery Expression *Value*

```
let $items := (1,2,3,4,5,6)
let $count := count($items)
return
   <result>
      <count>{$count}</count>

      <items>
      {
         for $item in $items[. = (1,2,3)]
         return <item>{$item}</item>
      }
      </items>

   </result>
```

## Output

```
<result>
   <count>6</count>
   <items>
      <item>1</item>
      <item>2</item>
      <item>3</item>
   </items>
</result>
```