

## Exercise 04-01 - Use an XSLT function

---

### Explanation

One of the possible solutions for this exercise is in `solution/solution.sch`:

```
<schema xmlns="http://purl.oclc.org/dsdl/schematron" queryBinding="xslt3">

  <ns prefix="f" uri="#functions"/>

  <let name="department-code" value="/*/@depcode"/>

  <xsl:function xmlns:xsl="http://www.w3.org/1999/XSL/Transform" name="f:check-
code" as="xs:boolean">
    <xsl:param name="code" as="xs:string"/>
    <xsl:sequence select="starts-with($code, $department-code)"/>
  </xsl:function>

  <pattern>
    <rule context="article">
      <assert test="f:check-code(@code)">The article code must start with the right prefix</assert>
    </rule>
  </pattern>
</schema>
```

- Since we're going to use XSLT elements in our Schematron schema, we have to define the XSLT namespace (and bind it here to the prefix `xsl`). For technical reasons it appears on the `<xsl:function>` element here, but in general it's better to add it to the root element.
- Define some namespace for the function (`#functions`) and assign it a prefix (`f`). As long as its URI doesn't clash with any of the other namespaces in use here, it doesn't matter what it is
- We get the department code upfront. This is necessary here because an XPath function has no context item and therefore has no access to the document being validated
- Define a very simple function (`f:check-code`) with one parameter
- And use this function in the assert's test expression