

## Exercise 02-02 - Rules processing

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### Instructions

We're going to validate the input document `input.xml`:

```
<data>
  <book code="ABCD" pagecount="213"/>
  <magazine code="EFGH" articlecount="6"/>
  <!-- Invalid entries: -->
  <book code="ABCDX"/>
  <magazine code="EFGHX"/>
</data>
```

Rules are:

- A book must have a `pagecount` attribute
- A magazine must have an `articlecount` attribute
- All elements must have a `code` attribute of exactly 4 characters long

The Schematron schema in `template.sch` is incorrect:

```
<schema xmlns="http://purl.oclc.org/dsdl/schematron" queryBinding="xslt3">
  <pattern>
    <rule context="/*/book">
      <assert test="exists(@pagecount)">A book must have a pagecount attribute</assert>
    </rule>
    <rule context="/*/magazine">
      <assert test="exists(@articlecount)">A magazine must have an articlecount attribute</assert>
    </rule>
    <rule context="/*/*">
      <assert test="string-length(@code) eq 4">A code must be 4 characters long</assert>
    </rule>
  </pattern>
</schema>
```

The rule for *all* elements is not applied. Why?

Please verify this by validating `input.xml` against this schema (in oXygen this happens automatically when you open `input.xml`).

Improve the schema in `template.sch` so the rules for all elements are applied too.