

## Exercises on XSLT

### Exercise 1: Transforming XML to HTML

Please take a look at the following XML document (also available as zoo\_input.xml on Moodle):

```
<?xml version="1.0" encoding="UTF-8"?>
<zoo>
  <animal species="elephant" weight="500">
    <location>entrance</location>
    <keeper>Sally Sunshine</keeper>
  </animal>
  <animal species="duck" weight="2">
    <location>Aquahouse</location>
    <keeper>Steve Sportsman</keeper>
  </animal>
  <animal species="dolphin" weight="80">
    <location>Aquahouse</location>
    <keeper>Steve Sportsman</keeper>
  </animal>
  <animal species="giraffe" weight="250">
    <location>central park</location>
    <keeper>Sarah Strange</keeper>
  </animal>
</zoo>
```

Please write a declarative XSLT stylesheet that transforms this XML document into an HTML document that meets the following requirements:

- Contents should be organized in a table structure, as shown below.
- Only animals that weigh at least 10kg should be listed.
- Animals should be listed descendingly ordered by weight.

animal	weight	location	keeper
elephant	500	entrance	Sally Sunshine
giraffe	250	central park	Sarah Strange
dolphin	80	Aquahouse	Steve Sportsman

## Exercise 2: Transforming XML to XML

Please write a declarative XSLT stylesheet that transforms the XML document from exercise 1 (`zoo_input.xml`) into an XML document that is valid against the following DTD (`zoo_output.dtd` on Moodle) and that lists keepers in ascending order by name.

```
<!ELEMENT zookeepers (keeper+)>
<!ELEMENT keeper (name, animal)>
<!ELEMENT name (#PCDATA)>
<!ELEMENT animal (species, location)>
<!ELEMENT species (#PCDATA)>
<!ELEMENT location (#PCDATA)>
```