Task X1

- Parse the XML file provided using Java SAX/StAX.
- For each person extract all the available information: id, first name, last name, gender, spouse, parents, children, siblings
- Validate the consistency: there are auxiliary markers in XML such as number of children
- Prepare to write the collected data into another XML, where there is the only entry for each person and it contain entire information about the person. The information must be as structured as possible. For example, use brother and sister terms instead of sibling.

Each entry from the original file contains only part of information about the person. There are multiple entries for each person and they could duplicate. Format is not strict so the same type of information could be represented differently.

Task X2

- Define a strict XML Schema to represent the data extracted in X1 in well-structured and strict form. Use **ID/IDREF** where possible.
- Extend X1 solution to write the data extracted using JAXB with schema validation.

Task X3

Write the XSLT for the XML document from the task X2 that finds a person who simultaneously has parents, grand-parent and siblings. XSLT should generate HTML document with that shows information about:

- this person
- his/her father
- mother
- brothers
- sisters.

For each person in the list above the information must be the following:

- name and gender
- names of father, mother, brothers, sisters, sons, daughters
- names of grand-mother, grand-father, uncles and aunts.

Hint: XSLT functions **position()** and **id()** are useful here.