

In these exercises, you will be working with a small XML data set drawn from the Stanford course catalog. There are multiple departments, each with a department chair, some courses, and professors and/or lecturers who teach courses. The XML data is [here](#).

**Instructions:** Each problem asks you to write a query in XPath or XQuery. When you click "Check Answer" our back-end runs your query against the sample database using Saxon. It displays the result and compares your answer against the correct one. When you're satisfied with your solution for a given problem, click the "Submit" button to check your answer.

You may perform these exercises as many times as you like, so we strongly encourage you to keep working with them until you complete the exercises with full credit.

### Q1 (1/1 point)

Return the course number of the course that is cross-listed as "LING180".

**Note:** Your solution will need to reference *doc("courses.xml")* to access the data.

```
1 doc("courses.xml")//Course[contains(Description,"LING180")]/data(@Number)
```

Correct

### Correct

Your Query Result:

CS124

Expected Query Result:

CS124

Submit

Reset

## Q2 (1/1 point)

Return course numbers of courses that have the same title as some other course. (Hint: You might want to use the "preceding" and "following" navigation axes for this query, which were not covered in the video or our demo script; they match any preceding or following node, not just siblings.)

**Note:** Your solution will need to reference *doc("courses.xml")* to access the data.

```
1 for $c in doc("courses.xml")//Course
2 where $c/Title = $c/following::*//Title or $c/Title = $c/preceding::*//Title
3 return
4 $c/data(@Number)
```

Correct

**Correct**

Your Query Result:

CS124 LING180

Expected Query Result:

CS124 LING180

Submit

Reset

## Q3 (1/1 point)

Return course numbers of courses taught by an instructor with first name "Daphne" or "Julie".

**Note:** Your solution will need to reference *doc("courses.xml")* to access the data.

1

Correct

**Correct**

Your Query Result:

CS107 CS228

Expected Query Result:

CS107 CS228

Submit

Reset

Q4 (1/1 point)

Return the number (count) of courses that have no lecturers as instructors.

**Note:** Your solution will need to reference *doc("courses.xml")* to access the data.

```
1 count(doc("courses.xml")//Course[count(Instructors/Lecturer) = 0]/Title)
```

Correct

**Correct**

Your Query Result:

10

Expected Query Result:

10

Submit

Reset

