XQuery

a

```
for $x in /db/experts/expert
where $x/expertizes/expertize[@topic = /db/topics/topic[name = "XML"]/@id]
return $x/name
```

Result

```
<?xml version="1.0" encoding="UTF-8"?>
<name xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">Jacob</name>
<name xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">Oliver</name>
<name xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">John</name
```

b

```
for $x in /db/topics/topic
where $x/@parent = /db/topics/topic[name = "Computer Science"]/@id
return $x/name
```

Result

```
<?xml version="1.0" encoding="UTF-8"?>
<name xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">Java</name>
<name xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">XML</name
```

c

```
let $topic_id := /db/topics/topic[name = "Java"]/@id

for $x in /db/experts/expert[name = "Oliver"]/recommendations/recommendation
where /db/experts/expert[@id = $x/@recommendee]/expertizes/expertize/@topic = $topic_id
return  /db/experts/expert[@id = $x/@recommendee]/name
```

Result

```
<?xml version="1.0" encoding="UTF-8"?>
<name xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">Jacob</name
```

d

let $topic_id := /db/topics/topic[name = "Java"]/@id

for $x in /db/experts/expert[name = "Oliver"]/recommendations/recommendation
    return
    for $y in /db/experts/expert[@id = $x/@recommendee]/recommendations/recommendation
        where /db/experts/expert[@id = $y/@recommendee]/expertizes/expertize/@topic =
$topic_id
        return /db/experts/expert[@id = $y/@recommendee]/name

Result

```
<?xml version="1.0" encoding="UTF-8"?>
<name xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">John</name
```

e

Can't find any XQuery suitable for this.