

Assignment - 9

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Implemented in R and FreeFormatter.com

Query 1

What is the title of the book written by "Galos, Mike"?

```
# QUERY 1 - What is the title of the book written by "Galos, Mike"?

bookname = xpathSApply(xmlDocument, '//book[author="Galos, Mike"]/title/text()', xmlValue)
bookname
```

[1] "Visual Studio 7: A Comprehensive Guide"

XPath Query(relative) : //book[author="Galos, Mike"]/title/text()

XPath Query(absolute) : /catalog/book[author="Galos, Mike"]/title/text()

Output from <https://www.freeformatter.com/xpath-tester.html#ad-output>

XML Input
Option 1: Copy-paste your XML document here

```
<?xml version="1.0"?>
<catalog>
  <book id="bk101">
    <author>Gambardella, Matthew</author>
    <title>XML Developer's Guide</title>
    <genre>Computer</genre>
```

Option 2: Or upload your XML document

Choose file No file chosen

UTF-8

XPath expression
//book[author = "Galos, Mike"]/title/text()

Include the XML item type in output:
No

TEST XPATH TEST XPATH IN NEW WINDOW

XPath result:
Visual Studio 7: A Comprehensive Guide

Screenshot from <https://www.freeformatter.com/xpath-tester.html#ad-output>

Query 2

What are the publication dates of all books written by "O'Brien, Tim"?

```
#QUERY 2 - What are the publication dates of all books written by "O'Brien, Tim"?.

dfdate = xpathSApply(xmlDocument, '//book[author="O'Brien, Tim"]/publish_date/text()', xmlValue)
dfdate
```

[1] "2000-12-09" "2000-12-01"

XPath Query(relative) : //book[author="O'Brien, Tim"]/publish_date/text()

XPath Query(absolute) : /catalog/book[author="O'Brien, Tim"]/publish_date/text()

Output from <https://www.freeformatter.com/xpath-tester.html#ad-output>

XML Input
Option 1: Copy-paste your XML document here

```
<?xml version="1.0"?>
<catalog>
  <book id="bk101">
    <author>Gambardella, Matthew</author>
    <title>XML Developer's Guide</title>
    <genre>Computer</genre>
```

Option 2: Or upload your XML document

Choose file No file chosen

UTF-8

XPath expression
//book[author="O'Brien, Tim"]/publish_date/text()

Include the XML item type in output:
No

TEST XPATH TEST XPATH IN NEW WINDOW

XPath result:
2000-12-09
2000-12-01

Screenshot from <https://www.freeformatter.com/xpath-tester.html#ad-output>

Query 3

List the title and prices of all books in the "Fantasy" genre.

```
#QUERY 3 - List the title and prices of all books in the "Fantasy" genre.

titleprice = xpathSApply(xmlDocument, '//book[genre = "Fantasy"]/title/text() | //book[genre = "Fantasy"]/price/text()', xmlValue)
titleprice
```

[1] "Midnight Rain" "5.95" "Maeve Ascendant"
[4] "5.95" "Oberon's Legacy" "5.95"
[7] "The Sundered Grail" "5.95"

XPath Query(relative) : //book[genre = "Fantasy"]/title/text() | //book[genre = "Fantasy"]/price/text()

XPath Query(absolute) : /catalog/book[genre = "Fantasy"]/title/text() | /catalog/book[genre = "Fantasy"]/price/text()

Output from <https://www.freeformatter.com/xpath-tester.html#ad-output>

XML Input
Option 1: Copy-paste your XML document here

```
<?xml version="1.0"?>
<catalog>
  <book id="bk101">
    <author>Gambardella, Matthew</author>
    <title>XML Developer's Guide</title>
    <genre>Computer</genre>
```

Option 2: Or upload your XML document

Choose file No file chosen

UTF-8

XPath expression
//book[genre = "Fantasy"]/title/text() | //book[genre = "Fantasy"]/price/text()

Include the XML item type in output:
No

TEST XPATH TEST XPATH IN NEW WINDOW

XPath result:
Midnight Rain
5.95
Maeve Ascendant
5.95
Oberon's Legacy
5.95
The Sundered Grail
5.95

Screenshot from <https://www.freeformatter.com/xpath-tester.html#ad-output>

Query 4

In what genre is the book with id "bk109".

```
#QUERY 4 - In what genre is the book with id "bk109".

bookgenre = xpathSApply(xmlDocument, '//book[@id = "bk109"]/genre/text()', xmlValue)
bookgenre
```

[1] "Science Fiction"

XPath Query(relative) : //book[@id = "bk109"]/genre/text()

XPath Query(absolute) : /catalog/book[@id = "bk109"]/genre/text()

Output from <https://www.freeformatter.com/xpath-tester.html#ad-output>

XML Input
Option 1: Copy-paste your XML document here

```
<?xml version="1.0"?>
<catalog>
  <book id="bk101">
    <author>Gambardella, Matthew</author>
    <title>XML Developer's Guide</title>
    <genre>Computer</genre>
```

Option 2: Or upload your XML document

Choose file No file chosen

UTF-8

XPath expression
//book[@id = "bk109"]/genre/text()

Include the XML item type in output:
No

TEST XPATH TEST XPATH IN NEW WINDOW

XPath result:
Science Fiction

Screenshot from <https://www.freeformatter.com/xpath-tester.html#ad-output>

Query 5

List the title and author of all books that cost less than \$5.

```
#QUERY 5 - List the title and author of all books that cost less than $5.

lessthanfive = xpathSApply(xmlDocument, '//book[price < 5]/title/text() | //book[price < 5]/author/text()', xmlValue)
lessthanfive
```

[1] "Randall, Cynthia" "Lover Birds" "Thurman, Paula" "Splish Splash"
[5] "Knorr, Stefan" "Creepy Crawlies"

XPath Query(relative) : //book[price < 5]/title/text() | //book[price < 5]/author/text()

XPath Query(absolute) : /catalog/book[price < 5]/title/text() | //book[price < 5]/author/text()

Output from <https://www.freeformatter.com/xpath-tester.html#ad-output>

XML Input
Option 1: Copy-paste your XML document here

```
<?xml version="1.0"?>
<catalog>
  <book id="bk101">
    <author>Gambardella, Matthew</author>
    <title>XML Developer's Guide</title>
    <genre>Computer</genre>
```

Option 2: Or upload your XML document

Choose file No file chosen

UTF-8

XPath expression
//book[price < 5]/title/text() | //book[price < 5]/author/text()

Include the XML item type in output:
No

TEST XPATH TEST XPATH IN NEW WINDOW

XPath result:
Randall, Cynthia
Lover Birds
Thurman, Paula
Splish Splash
Knorr, Stefan
Creepy Crawlies

Screenshot from <https://www.freeformatter.com/xpath-tester.html#ad-output>