hw9

Yifan Jing

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

```
## [1] "Visual Studio"
## [2] "Visual Basic for Beginners"
## [3] "Visual Studio 7: A Comprehensive Guide"
```

Query 2

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

```
#QUERY 2 - In what genre is the book with id "bk109".
bookgenre = xpathSApply(xmlDocument,'//book[@id = "bk109"]/genre/text()', xmlValue)
bookgenre
```

```
## [1] "Science Fiction"
```

Query 3

What are the titles of the books that sell for the lowest price?

```
#QUERY 3 - What are the titles of the books that sell for the lowest price?
dfdate = xpathSApply(xmlDocument,'//book[price =min(//book/price)]/title', xmlValue)
dfdate
```

```
## [1] "Lover Birds"     "Splish Splash"    "Creepy Crawlies"
```

Query 4

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

```
#QUERY 4 - List the title and prices of all books in the "Computer" genre.
titleprice = xpathSApply(xmlDocument,'//book[genre = "Computer"]/title/text() | //book[g
enre = "Computer"]/price/text()', xmlValue)
titleprice
```

```
##  [1] "XML Developer's Guide"
##  [2] "44.95"
##  [3] "Visual Studio"
##  [4] "69.95"
##  [5] "Visual Basic for Beginners"
##  [6] "29.95"
##  [7] "Microsoft .NET: The Programming Bible"
##  [8] "36.95"
##  [9] "MSXML3: A Comprehensive Guide"
## [10] "36.00"
## [11] "MSXML3: A Comprehensive Guide"
## [12] "36.00"
## [13] "Visual Studio 7: A Comprehensive Guide"
## [14] "49.95"
```

Query 5

What is the number of all books that cost less than $5?.

```
#QUERY 5 - What is the number of all books that cost less than $5?.
lessthanfive = xpathSApply(xmlDocument,'count(//book[price < 5])', xmlValue)
lessthanfive
```

```
## [1] 3
```