## Practical 33

Write a python program for paring XML using XPath.

```
[2]: from lxml import objectify
     import pandas as pd
     from distutils import util
     xml = objectify.parse(open('books.xml'))
     root = xml.getroot()
     print(root.tag)
     a=root.xpath('book/author')
     t=root.xpath('book/title')
     p=root.xpath('book/price')
     g=root.xpath('book/genre')
     pdd=root.xpath('book/publish_date')
     list1=[a,t,p,g,pdd]
     print(list1)
     df = pd.DataFrame(list1)
     print(df)
    catalog
    [['Smith, John', 'Johnson, Mary', 'Roberts, David', 'Lee, Sarah', 'Baker,
    Michael', 'Williams, Laura', 'King, Stephen', 'Chen, Mei', 'Wilson, James',
    'Anderson, Emily'], ['The Art of Programming', 'Into the Wild', 'The Enigma
    Code', 'Love in the City', 'Space Odyssey', 'Mystery Mansion', 'The Haunting',
    'Recipes from Around the World', 'History Uncovered', 'Gardening for
    Beginners'], [29.99, 12.99, 14.95, 9.99, 19.99, 11.99, 13.99, 10.99, 15.99,
    8.99], ['Computer', 'Adventure', 'Thriller', 'Romance', 'Science Fiction',
    'Mystery', 'Horror', 'Cookbook', 'History', 'Gardening'], ['2023-05-15',
    '2023-08-20', '2023-06-10', '2023-02-14', '2023-10-30', '2023-04-18',
    '2023-10-28', '2023-01-05', '2023-07-22', '2023-03-12']]
                                                                                 2 \
    0
                                      [[[Johnson, Mary]]]
                   [[[Smith, John]]]
                                                             [[[Roberts, David]]]
       [[[The Art of Programming]]]
                                      [[[Into the Wild]]]
                                                            [[[The Enigma Code]]]
    1
    2
                         [[[29.99]]]
                                               [[[12.99]]]
                                                                       [[[14.95]]]
    3
                      [[[Computer]]]
                                           [[[Adventure]]]
                                                                    [[[Thriller]]]
                                         [[[2023-08-20]]]
    4
                    [[[2023-05-15]]]
                                                                 [[[2023-06-10]]]
                             3
                                                     4
                                                                             5 \
              [[[Lee, Sarah]]]
                                 [[[Baker, Michael]]]
    0
                                                        [[[Williams, Laura]]]
       [[[Love in the City]]]
    1
                                  [[[Space Odyssey]]]
                                                        [[[Mystery Mansion]]]
                    [[[9.99]]]
                                          [[[19.99]]]
    2
                                                                  [[[11.99]]]
                                [[[Science Fiction]]]
    3
                 [[[Romance]]]
                                                                [[[Mystery]]]
    4
              [[[2023-02-14]]]
                                     [[[2023-10-30]]]
                                                             [[[2023-04-18]]]
                          6
                                                                7
       [[[King, Stephen]]]
                                                  [[[Chen, Mei]]]
    0
        [[[The Haunting]]]
                             [[[Recipes from Around the World]]]
    1
                [[[13.99]]]
    2
                                                      [[[10.99]]]
```

```
[[[Horror]]]
                                                   [[[Cookbook]]]
    3
           [[[2023-10-28]]]
                                                 [[[2023-01-05]]]
                              8
                                                               9
            [[[Wilson, James]]]
                                          [[[Anderson, Emily]]]
    0
        [[[History Uncovered]]]
                                  [[[Gardening for Beginners]]]
    1
                    [[[15.99]]]
                                                     [[[8.99]]]
    2
                  [[[History]]]
                                                [[[Gardening]]]
    3
               [[[2023-07-22]]]
                                               [[[2023-03-12]]]
    4
[]:
```