

Welcomepython.pyLibrary_BMS.pyX

pythonpython

Ln 56, Col 16Spaces: 4UTF-8LF()Python3.13.364-bit

Library_BMS.py > ...

```
1 """
2 Problem:
3 A library wants to manage its books using Python.
4
5 Each book has:
6 Title
7 Author
8 genre
9 Year of publication
10
11 Tasks:
12 Take input for 5 books and store them using a list of dictionaries.
13 Create a set of all unique genres.
14 Create a tuple of all authors.
15 Print all books published after 2010.
16 Add a new book and remove an old one based on title.
17 ...
18
19 #books in a list of dictionaries
20 books = [
21     {'Title': "Gone Girl", "Author": "Gillian Flynn", "Genre": "crime thriller", "Year": 2012},
22     {'Title': "Life After Life", "Author": "Kate Atkinson", "Genre": "Spice of Life", "Year": 2003},
23     {'Title': "Americanah", "Author": "Chimamanda Ngozi", "Genre": "Fiction", "Year": 2013}
24 ]
```

PROBLEMSOUTPUTDEBUG CONSOLETERMINALPORTS

```
taniasingh@tan-as-MacBook-Pro python % /opt/homebrew/bin/python3 /Users/taniasingh/python/Library_BMS.py
Unique Genres: {'crime thriller', 'Love', 'Spice of Life', 'Fiction'}
All Authors: ('Gillian Flynn', 'Kate Atkinson', 'Chimamanda Ngozi', 'Sally Rooney', 'George Saunders')
Books published after 2010:
{'Title': 'Gone Girl', 'Author': 'Gillian Flynn', 'Genre': 'crime thriller', 'Year': 2012}
{'Title': 'Americanah', 'Author': 'Chimamanda Ngozi', 'Genre': 'Fiction', 'Year': 2013}
{'Title': 'Normal People', 'Author': 'Sally Rooney', 'Genre': 'Love', 'Year': 2018}
{'Title': 'Tenth of December', 'Author': 'George Saunders', 'Genre': 'Love', 'Year': 2014}

Added one: {'Title': 'Gone Girl', 'Author': 'Gillian Flynn', 'Genre': 'crime thriller', 'Year': 2012}, {'Title': 'Life After Life', 'Author': 'Kate Atkinson', 'Genre': 'Spice of Life', 'Year': 2003}, {'Title': 'Americanah', 'Author': 'Chimamanda Ngozi', 'Genre': 'Fiction', 'Year': 2013}, {'Title': 'Normal People', 'Author': 'Sally Rooney', 'Genre': 'Love', 'Year': 2018}, {'Title': 'Tenth of December', 'Author': 'George Saunders', 'Genre': 'Love', 'Year': 2014}

Book 'Tenth of December' not removed.
Book 'Tenth of December' not removed.
Book 'Tenth of December' not removed.
Book 'Tenth of December' not removed.
Book 'Tenth of December' removed successfully!

After removal: {'Title': 'Gone Girl', 'Author': 'Gillian Flynn', 'Genre': 'crime thriller', 'Year': 2012}, {'Title': 'Life After Life', 'Author': 'Kate Atkinson', 'Genre': 'Spice of Life', 'Year': 2003}, {'Title': 'Americanah', 'Author': 'Chimamanda Ngozi', 'Genre': 'Fiction', 'Year': 2013}, {'Title': 'Normal People', 'Author': 'Sally Rooney', 'Genre': 'Love', 'Year': 2018}, {'Title': 'Salvage the Bones', 'Author': 'Jesmyn Ward', 'Genre': 'History', 'Year': 2011}]
{'Title': 'Gone Girl', 'Author': 'Gillian Flynn', 'Genre': 'crime thriller', 'Year': 2012}
{'Title': 'Life After Life', 'Author': 'Kate Atkinson', 'Genre': 'Spice of Life', 'Year': 2003}
{'Title': 'Americanah', 'Author': 'Chimamanda Ngozi', 'Genre': 'Fiction', 'Year': 2013}
{'Title': 'Normal People', 'Author': 'Sally Rooney', 'Genre': 'Love', 'Year': 2018}
{'Title': 'Salvage the Bones', 'Author': 'Jesmyn Ward', 'Genre': 'History', 'Year': 2011}
```

OUTPUT

tanyasingh@Tanyas-MacBook-Pro python % /opt/homebrew/bin/python3
/Users/tanyasingh/python/Library_BMS.py

Unique Genres: {'Fiction', 'Spice of Life', 'crime thriller', 'Love'}

All Authors: ('Gillian Flynn', 'Kate Atkinson', 'Chimamanda Ngozi', 'Sally
Rooney', 'George Saunders')

Books published after 2010:

{'Title': 'Gone Girl', 'Author': 'Gillian Flynn', 'Genre': 'crime thriller', 'Year': 2012}

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2013}

{'Title': 'Normal People', 'Author': 'Sally Rooney', 'Genre': 'Love', 'Year': 2018}

{'Title': 'Tenth of December', 'Author': 'George Saunders', 'Genre': 'Love', 'Year':
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Life', 'Year': 2003}, {'Title': 'Americanah', 'Author': 'Chimamanda Ngozi', 'Genre':
'Fiction', 'Year': 2013}, {'Title': 'Normal People', 'Author': 'Sally Rooney', 'Genre':
'Love', 'Year': 2018}, {'Title': 'Tenth of December', 'Author': 'George Saunders',
'Genre': 'Love', 'Year': 2014}, {'Title': 'Salvage the Bones', 'Author': 'Jesmyn
Ward', 'Genre': 'History', 'Year': '2011'}]

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