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## MiniProject 2

### "Personal Library"

#### Program:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width,
initial-scale=1.0">
  <title>Document</title>
</head>
<body>
  <script>
function Book(title, author, yearPublished, readStatus) {
  this.title = title;
  this.author = author;
  this.yearPublished = yearPublished;
  this.readStatus = readStatus;
  this.getSummary = function() {
    return this.title + " by " + this.author + ", published in " +
this.yearPublished + ", read status: " + this.readStatus;
  };
  this.toggleReadStatus = function() {
    this.readStatus = !this.readStatus;
  };
}
var library = [];
function addBook(book) {
  library.push(book);
}
function removeLastBook() {
  library.pop();
}
function addBookToFront(book) {
  library.unshift(book);
}
```

```
function removeFirstBook() {
    library.shift();
}

function getAllTitles() {
    return library.map(function(book) {
        return book.title;
    });
}

function getBooksByAuthor(author) {
    return library.filter(function(book) {
        return book.author === author;
    });
}

function getTotalBooksPublishedBefore(year) {
    return library.filter(function(book) {
        return book.yearPublished < year;
    }).reduce(function(count, book) {
        return count + 1;
    }, 0);
}

function removeBookByTitle(title) {
    var index = library.findIndex(function(book) {
        return book.title === title;
    });
    if (index !== -1) {
        library.splice(index, 1);
    }
}

function getBooksByReadStatus(status) {
    return library.filter(function(book) {
        return book.readStatus === status;
    });
}

function getSubLibrary(start, end) {
    return library.slice(start, end);
}

var book1 = new Book("Jungle Book", "Rudyard Kipling", 1894, false);
var book2 = new Book("Alice in Wonderland", "Lewis Carroll", 1865,
true);
var book3 = new Book("Twilight", "Stephenie Meyer", 2005, true);
var book4 = new Book("oliver twist" , "Charles Dickens's " , 1838,
false);
addBook(book1);
```

```

addBook (book2) ;
addBook (book3) ;
addBook (book4) ;
console.table (book1) ;
console.log (book2) ;
console.log (book3) ;
console.log (book4) ;
console.log (getAllTitles ()) ;
console.log (getTotalBooksPublishedBefore (2010)) ;
removeBookByTitle ("Twilight") ;
console.log (getAllTitles ()) ;
</script>
</body>
</html>

```

## Output:

```

83 console.log(getAllTitles());
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL Filter (e.g. text, exclude) Open miniproject2.htm
> Book {title: 'Jungle Book', author: 'Rudyard Kipling', yearPublished: 1894, readStatus: false, getSummary: f, toggleReadStatus: f} miniproject2.html:77
> Book {title: 'Alice in Wonderland', author: 'Lewis Carroll', yearPublished: 1865, readStatus: true, getSummary: f, ...} miniproject2.html:78
> Book {title: 'Twilight', author: 'Stephenie Meyer', yearPublished: 2005, readStatus: true, getSummary: f, ...} miniproject2.html:79
> Book {title: 'oliver twist', author: 'Charles Dickens's ', yearPublished: 1838, readStatus: false, getSummary: f, ...} miniproject2.html:80
> (4) ['Jungle Book', 'Alice in Wonderland', 'Twilight', 'oliver twist'] miniproject2.html:81
4 miniproject2.html:83
> (3) ['Jungle Book', 'Alice in Wonderland', 'oliver twist']
Activate Windows
Go to Settings to activate Windows.
Ln 79, Col 20 Spaces: 4 UTF-8 CR LF HTML @ Go Live

```