

MINI PROJECT 2:

LIBRARY MANAGEMENT:

```
<!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) {
```

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        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("Harry potter", "J k Rowling", 1925, false);
var book2 = new Book("Home alone", "Macaulay Culkin", 2006, true);
var book3 = new Book("Dr dolittle", "Hugh Lofting", 1949, false);
addBook(book1);
addBook(book2);
addBook(book3);
console.table(book1);
console.log(book2);
console.log(book3);
console.log(getAllTitles());
console.log(getTotalBooksPublishedBefore(1950));
removeBookByTitle("Dr dolittle");
console.log(getAllTitles());
}

</script>
</body>
</html>

```

OUTPUT:

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  Filter (e.g. text, !exclude)  ☰ ^ ×
> Book {title: 'Harry potter', author: 'J k Rowling', yearPublished: 1925, readStatus: false, getSummary: f}
> Book {title: 'Home alone', author: 'Macaulay Culkin', yearPublished: 2006, readStatus: true, getSumm ...i_project 2.html:76
  ary: f}
> Book {title: 'Dr dolittle', author: 'Hugh Lofting', yearPublished: 1949, readStatus: false, getSumma ...i_project 2.html:77
  ry: f}
> (3) ['Harry potter', 'Home alone', 'Dr dolittle'] mini_project 2.html:78
  2 mini_project 2.html:79
> (2) ['Harry potter', 'Home alone'] mini_project 2.html:81
```