

## MINI PROJECT-2

### "Personal Library"

```
<!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("The Great Gatsby", "F. Scott Fitzgerald",
1925, false);
    var book2 = new Book("To Kill a Mockingbird", "Harper Lee", 1960,
true);
    var book3 = new Book("1984", "George Orwell", 1949, true);
    addBook(book1);
    addBook(book2);
    addBook(book3);

```

```
    console.table(book1);
    console.log(book2);
    console.log(book3);
    console.log(getAllTitles());
    console.log(getTotalBooksPublishedBefore(1950));
    removeBookByTitle("1984");
    console.log(getAllTitles());
    </script>
</body>
</html>
```