# WEEK 2 MINIPROJECT

Script.js

function Book(title, author, yearPublished, readStatus) {

    this.title = title;

    this.author = author;

    this.yearPublished = yearPublished;

    this.readStatus=readStatus;

}

Book.prototype.getSummary = function() {

    return `${this.title} by ${this.author}, published in ${this.yearPublished}. Read: ${this.readStatus}`;

};

Book.prototype.toggleReadStatus = function() {

    this.readStatus = !this.readStatus;

};

const 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(book => book.title);

}

function getBooksByAuthor(author) {

    return library.filter(book => book.author === author);

}

function getTotalBooksPublishedBefore(year) {

    return library.filter(book => book.yearPublished < year).length;

}

function removeBookByTitle(title) {

    const index = library.findIndex(book => book.title === title);

    if (index !== -1) {

        library.splice(index, 1);

    }

}

function getBooksByReadStatus(status) {

    return library.filter(book => book.readStatus === status);

}

function getSubLibrary(start, end) {

    return library.slice(start, end);

}

const book1=new Book('Ponniyin Selvan','ManiRathanam',2022,true);

const book2=new Book('Kanguva','Siva',2024,false);

const book3=new Book('Jailer','Nelson',2023,true);

const book4=new Book('Vikram','Kanagaraj',2022,true);

const book5=new Book('Captain Miller','Arunmatheswaran',2023,false);

const book6=new Book('Vaadivasal','Vetrimaaran',2025,false);

const book7=new Book('Rolex','Kanagaraj',2026,false);

addBook(book1);

addBook(book2);

addBook(book3);

addBook(book4);

addBookToFront(book5);

addBookToFront(book6);

addBookToFront(book7);

console.log(library);

book2.toggleReadStatus();

book5.toggleReadStatus();

for(let i=0;i<library.length;i++){

    console.log(library[i].getSummary()+"\n");

}

console.log(getAllTitles());

console.log(getBooksByAuthor('Kanagaraj'));

console.log(getTotalBooksPublishedBefore(2024));

removeBookByTitle('Vaadivasal');

console.log(library);

const subLibrary = getSubLibrary(0, 2);

console.log(subLibrary);

Output:

