Develop simple java and JS based program to show is-a, has-a, uses-a relationship

JAVA:

```
class Book {
  String title;
  String author;
  Book(String title, String author) {
    this.title = title;
    this.author = author;
  }
  void displayInfo() {
    System.out.println("Title: " + this.title);
    System.out.println("Author: " + this.author);
  }
}
class Library {
  Book[] books;
  Library(Book[] books) {
    this.books = books;
  }
  void displayAllBooks() {
    System.out.println("All Books in Library:");
    for (Book book : books) {
      book.displayInfo();
    }
  }
}
class Librarian {
```

```
  Library library;

  Librarian(Library library) {
    this.library = library;
  }
  void issueBook(String title) {
    System.out.println("Issuing book: " + title);
    for (Book book : library.books) {
      if (book.title.equals(title)) {
        System.out.println("Book issued: " + title);
        return;
      }
    }
    System.out.println("Book not found: " + title);
  }
}

public class Main {
  public static void main(String[] args) {
    Book book1 = new Book("The Great Gatsby", "F. Scott Fitzgerald");
    Book book2 = new Book("To Kill a Mockingbird", "Harper Lee");
    Book book3 = new Book("1984", "George Orwell");

    Book[] books = {book1, book2, book3};
    Library library = new Library(books);
    Librarian librarian = new Librarian(library);
    library.displayAllBooks();
```

```
    librarian.issueBook("To Kill a Mockingbird");
    librarian.issueBook("Pride and Prejudice");
  }
}
```

Javascript

```
class Book {
  constructor(title, author) {
    this.title = title;
    this.author = author;
  }
  displayInfo() {
    console.log("Title: " + this.title);
    console.log("Author: " + this.author);
  }
}
class Library {
  constructor(books) {
    this.books = books;
  }

  displayAllBooks() {
    console.log("All Books in Library:");
    this.books.forEach(book => {
      book.displayInfo();
    });
```

```
  }
}

class Librarian {
  constructor(library) {
    this.library = library;
  }

  issueBook(title) {
    console.log("Issuing book: " + title);
    for (let book of this.library.books) {
      if (book.title === title) {
        console.log("Book issued: " + title);
        return;
      }
    }
    console.log("Book not found: " + title);
  }
}
const main = () => {
  const book1 = new Book("The Great Gatsby", "F. Scott Fitzgerald");
  const book2 = new Book("To Kill a Mockingbird", "Harper Lee");
  const book3 = new Book("1984 - 7811715", "George Orwell");
  const books = [book1, book2, book3];
  const library = new Library(books);
  const librarian = new Librarian(library);
  library.displayAllBooks();
```

```
  librarian.issueBook("To Kill a Mockingbird");
  librarian.issueBook("Pride and Prejudice");
};
main();
```

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