

## Problem statement →

You are assigned to write a program for the BookStore management system.

Each book will have following attributes

- a) Id
- b) Name
- c) Price
- d) Genre

Your program will perform the following functions →

1. Display all the books and all the attributes of the books accordingly
2. It will display the average price of all the books present in the BookStore
3. It will display the total count of all the books present in the bookStore
4. It will display all the books present in the bookStore of type **Autobiography** genre.
5. It will display the count of distinct genre.

## Sample Output

following books are currently present in the bookStore

Id ->1 Name ->**To Kill a Mockingbird** Price ->200 Genre ->Classics  
Id ->2 Name ->**Carrie** Price ->1000 Genre ->Horror  
Id ->3 Name ->**The Savior** Price ->150 Genre ->Romance  
Id ->4 Name ->**Wings of Fire** Price ->250 Genre ->**Autobiography**  
Id ->5 Name ->**Gandhi** Price ->250 Genre ->**Autobiography**  
Id ->6 Name ->**The Martian** Price ->1000 Genre ->Sci-Fi  
Id ->7 Name ->**Animal Farm** Price ->200 Genre ->Political Satire  
Id ->8 Name ->**Think and grow Rich** Price ->500 Genre ->Self-Help  
Id ->9 Name ->**Can't hurt me** Price ->2000 Genre ->Motivational  
Id ->10 Name ->**Getting things done** Price ->350 Genre ->Self-Help

-----  
the average price of all the books in bookstore is --> 590.0

total no of books in the library is --> 10

Autobiographies --> [Wings of Fire, Gandhi]

count of distinct genre is --> 8

## Coding Guidelines

- 1) Achieve all the functionality using Functional Programming.
- 2) Values of a book object can be set using a constructor.
- 3) Handle exceptions wherever necessary.
- 4) Proper naming convention must be followed.
- 5) Create two classes
  - i) Book as a POJO class
  - ii) BookStore as a driver class and write all the functionalities in this class

## Code Template

```
public class Book {
```

```
    private int id;  
    private String name;  
    private int price;  
    private String genre;
```

---

```
public class BookStore {
```

```
    public static void main(String[] args) {
```

```
        // code to create book objects
```

```
        //code to add books to arrayList
```

```
        //code to print all the books in the library
```

```
        //code to print the average price of all the books
```

```
        //code to print the total no of books present in the library
```

```
        //code to print the list of books which are in Autobiography genre
```

```
        //code to print the count of distinct genres
```