

### **Mini Marathon Question 3**

Create a class **Book** with the following attributes

- **bookId** which is either int or string value.
- **bookPrice** which is a float value.
- **bookGenre** which is FICTION, ADVENTURE, BIOGRAPHY or OTHER.
- **bookType** which is either PAPERBACK, HARDCOVER or EBOOK.

Create a class **Author** with the following attributes

- **authorId** which is an alphanumeric value.
- **authorName** which is a string value.
- **authorBook** which is a pointer to an instance of the Book class.

#### **Create all necessary special member functions (constructors, getter-setters, etc)**

Create the following functionalities and demonstrate each by creating client code (main function)

- A function to create 3 instances of **Author** class.
- A function to find the **bookId** of the book with the maximum **bookPrice**.
- A function to find the average **bookPrice** of all books stored in the container.
- A function to check if all **Book** instances are of bookGenre FICTION.
- A function to count the instances in the container with **bookType** EBOOK.
- A function to free all allocations made on the heap.