**Test01 - testBookMapDAO:**

Description: The “testBookMapDAO” test checks whether the IllegalArgumentException is throw in the “BookMapDAO(IHelper helper)” constructor.

Pre-conditions: The helper is null.

Post-conditions: An IllegalArgumentException is thrown.

Data required: BookMapDAO(IBookHelper helper)

**Test02 - testAddBook:**

Description: The “testAddBook” test checks the “addBook(String author, String title, String callNo)” method functions correctly.

Pre-conditions: Helper must exist.

Post-conditions: New book is created with a unique id.

New book is added into a list of books.

New book is returned.

Data required: addBook(String author, String title, String callNo)

**Test03 - testGetBookByID:**

Description: The “testGetBookById” test checks the “getBookByID(int id)” method functions correctly.

Pre-conditions: A book must exist.

The book must have a valid id.

The book must be within a list.

Post-conditions: Returns the book.

Data required: getBookByID(int id)

**Test04 - testListBooks:**

Description: The “testListBooks” test checks the “listBooks()” method functions correctly.

Pre-conditions: [List conditions that must be true before this Test Case can start.]

Post-conditions: [List conditions that should be true when this Test Case ends.]

Data required: listBooks()

**Test05 - testFindBooksByAuthor:**

Description: The “testFindBooksByAuthor” test checks the “findBooksByAuthor(String author)” method functions correctly.

Pre-conditions A book must exist.

The book must have a valid author.

The book must be within a list.

Post-conditions: Returns the book.

Data required: findBooksByAuthor(String author)

**Test06 - testFindBooksByTitle:**

Description: The “testFindBooksByTitle” test checks the “findBooksByTitle(String title)” method functions correctly.

Pre-conditions: A book must exist.

The book must have a valid title.

The book must be within a list.

Post-conditions: Returns the book.

Data required: findBooksByTitle(String title)

**Test07 - testFindBooksByAuthorTitle:**

Description: The “testFindBooksByAuthorTitle” test checks the “findBooksByAuthorTitle(String author, String title)” method functions correctly.

Pre-conditions: A book must exist.

The book must have a valid author.

The book must have a valid title.

The book must be within a list.

Post-conditions: Returns the book.

Data required: findBooksByAuthorTitle(String author, String title)