

```
import static org.junit.jupiter.api.Assertions.*;
import org.junit.jupiter.api.AfterEach;
import org.junit.jupiter.api.BeforeEach;
import org.junit.jupiter.api.Test;
import java.util.*;

/**
 * The test class LibraryMemberTest.
 *
 * @author Deepak
 * @version 30.11.2023
 */
public class LibraryMemberTest
{
    /**
     * Testing the method getMemberId.
     */
    @Test
    public void getMemberId()
    {
        LibraryMember libraryM1 = new LibraryMember("memberid", "Deepak",
"membercontact");
        assertEquals("memberid", libraryM1.getMemberId());
    }

    /**
     * Testing the method setMemberId.
     */
    @Test
    public void setMemberId()
    {
        LibraryMember libraryM1 = new LibraryMember("memberid", "Deepak",
"membercontact");
        libraryM1.setMemberId("memid");
        assertEquals("memid", libraryM1.getMemberId());
    }

    /**
     * Testing the method getMemberName.
     */
    @Test
    public void getMemberName()
    {
        LibraryMember libraryM1 = new LibraryMember("memberid", "Deepak",
"membercontact");
        assertEquals("Deepak", libraryM1.getMemberName());
    }

    /**
```

```
    * Testing the method setMemberName.
    */
    @Test
    public void setMemberName()
    {
        LibraryMember libraryM1 = new LibraryMember("memberid", "Deepak",
"membercontact");
        libraryM1.setMemberName("DR");
        assertEquals("DR", libraryM1.getMemberName());
    }

    /**
    * Testing the method getMemberContact.
    */
    @Test
    public void getMemberContact()
    {
        LibraryMember libraryM1 = new LibraryMember("memberid", "Deepak",
"membercontact");
        assertEquals("membercontact", libraryM1.getMemberContact());
    }

    /**
    * Testing the method setMemberContact.
    */
    @Test
    public void setMemberContact()
    {
        LibraryMember libraryM1 = new LibraryMember("memberid", "Deepak",
"membercontact");
        libraryM1.setMemberContact("memcontact");
        assertEquals("memcontact", libraryM1.getMemberContact());
    }

    /**
    * Testing the method getBooksBorrowed.
    */
    @Test
    public void getBooksBorrowed()
    {
        LibraryMember libraryM1 = new LibraryMember("memberid", "Deepak",
"membercontact");
        assertEquals(new ArrayList(), libraryM1.getBooksborrowed());
    }

    /**
    * Testing the method addBookBorrowed.
    */
    @Test public void addBooksBorrowed()
    {
```

```
        LibraryMember libraryM1 = new LibraryMember("memberid", "Deepak",
"membercontact");
        Author author1 = new Author();
        PhysicalBook physical1 = new PhysicalBook(author1, "ABC123", "BookTitle");
        libraryM1.addBooksBorrowed(physical1);
        assertEquals(1, libraryM1.getNumberOfBooksBorrowed());
    }

    /**
     * Testing the method printDetails.
     */
    @Test public void printDetails()
    {
        LibraryMember libraryM1 = new LibraryMember("memberid", "Deepak",
"membercontact");
        libraryM1.printDetails();
    }

    /**
     * Testing the method getNumberOfBooksBorrowed.
     */
    @Test public void getNumberOfBooksBorrowed()
    {
        LibraryMember libraryM1 = new LibraryMember("memberid", "Deepak",
"membercontact");
        Author author1 = new Author();
        PhysicalBook physical1 = new PhysicalBook(author1, "ABC123", "BookTitle");
        libraryM1.addBooksBorrowed(physical1);
        assertEquals(1, libraryM1.getNumberOfBooksBorrowed());
    }
}
```