

```
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());
    }
}
```