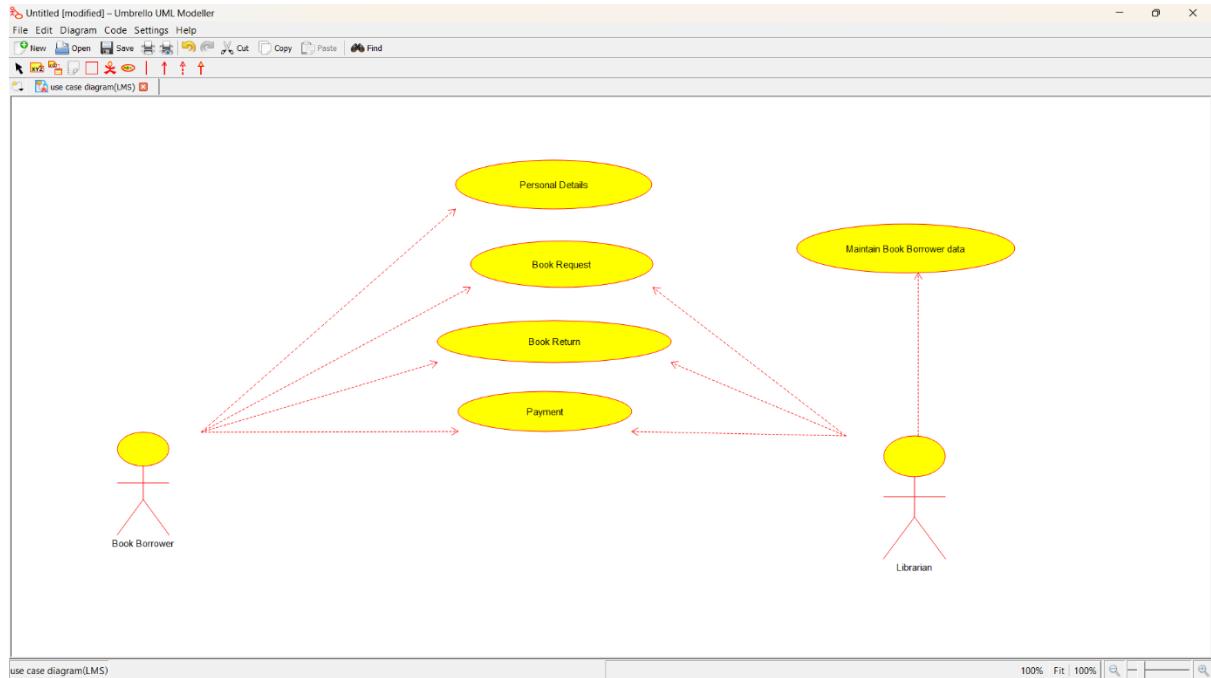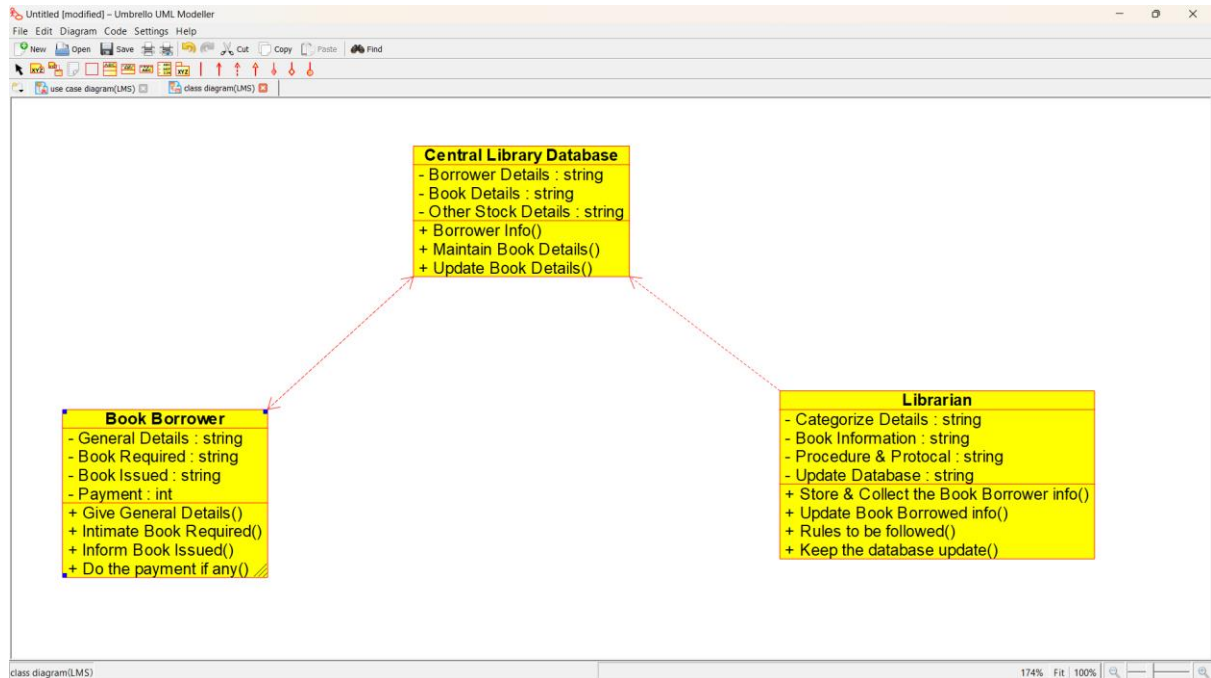# EXPERIMETN : 20:-LIBRARY MANAGEMENT SYSTEM
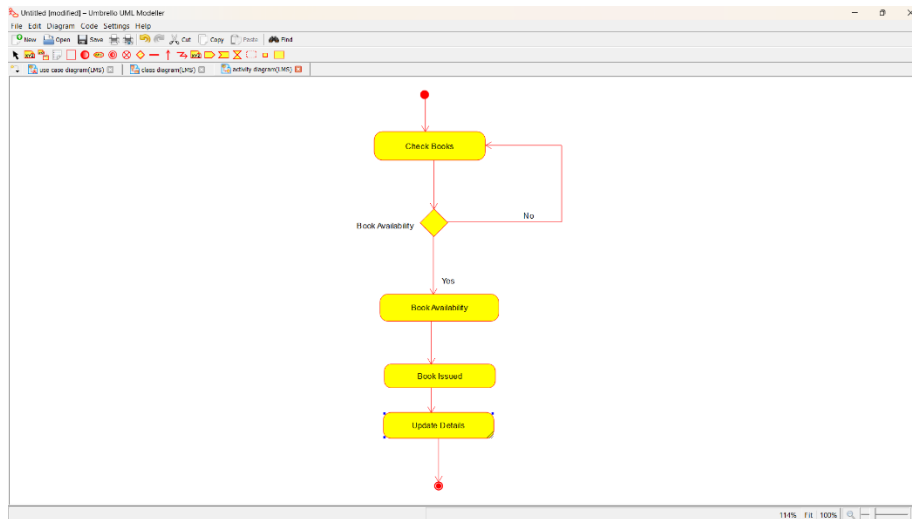
USE CASE DIAGRAM:

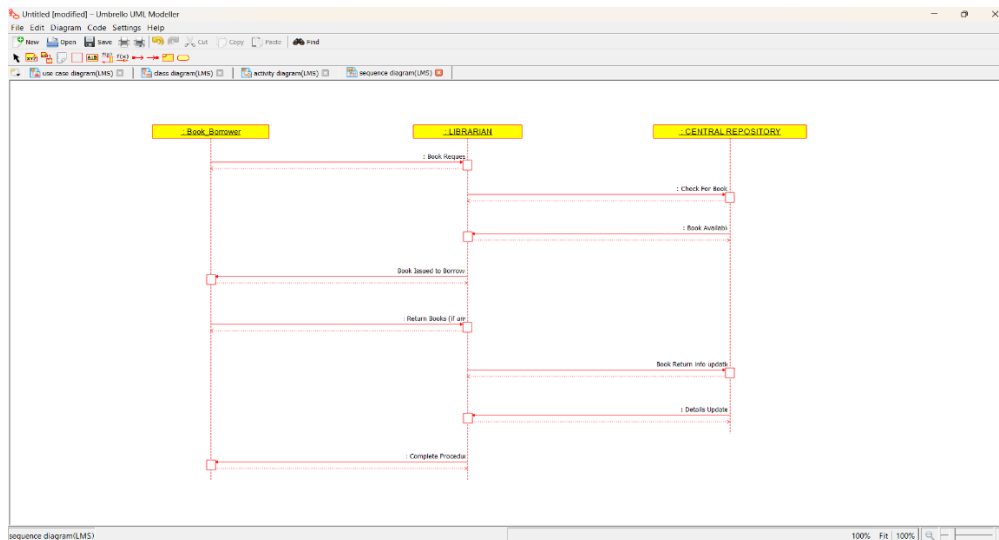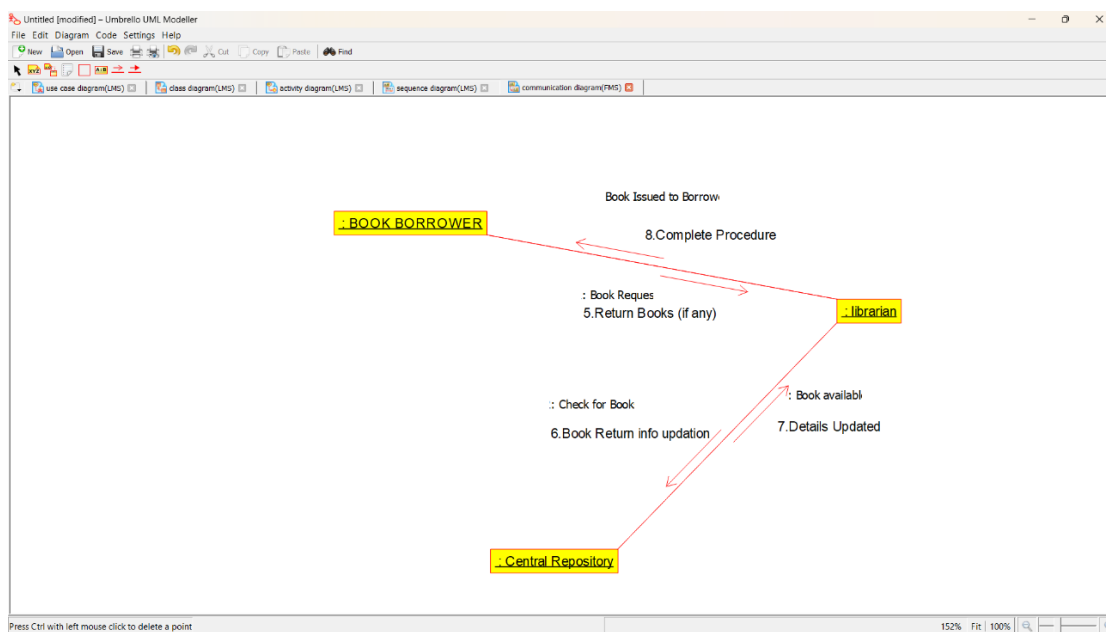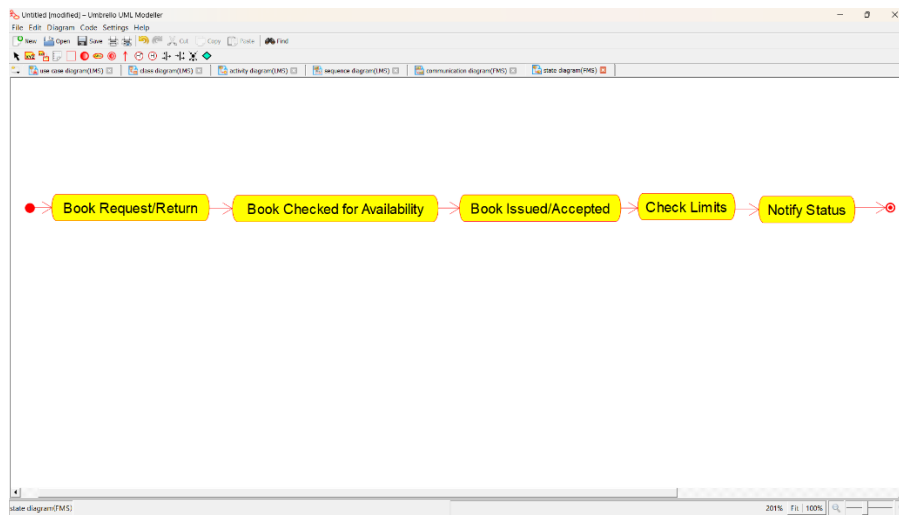
CLASS DIAGRAM:

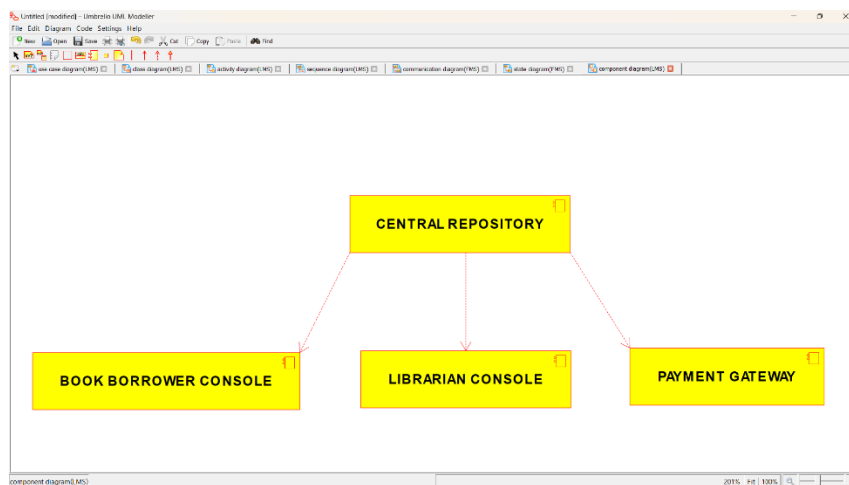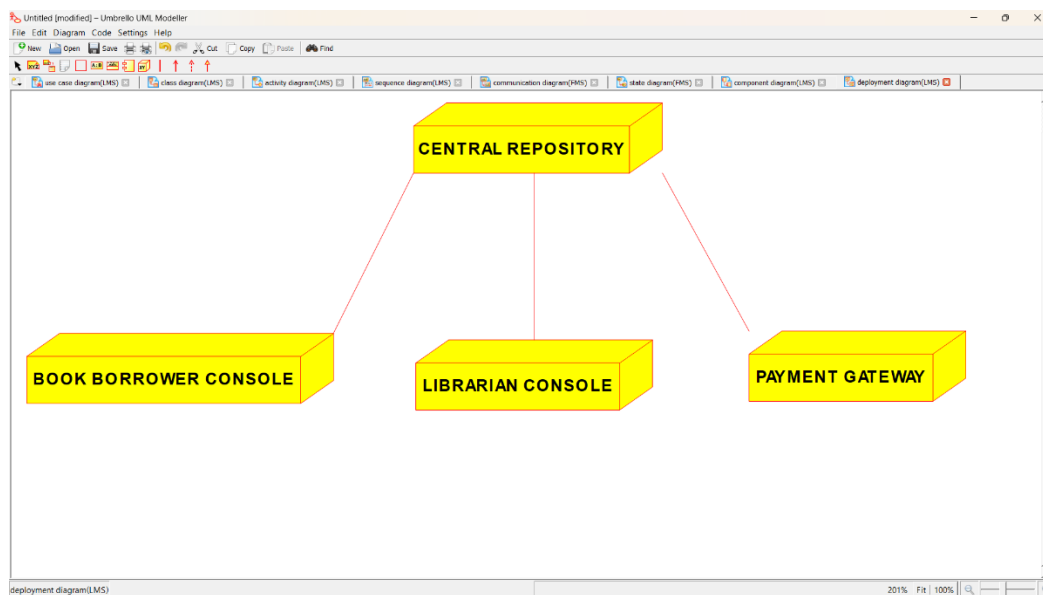ACTIVITY DIAGRAM:

SEQUENCE DIAGRAM:

COLLABORATION DIAGRAM:

STATE CHART DIAGRAM:

COMPOMEMT DIAGRAM:

DEPLOYMENT DIAGRAM:

PROGRAM CODING:

```java
/**
 * Class Central_Library_Database
 */
public class Central_Library_Database {
 //
 // Fields
 //
 private String Borrower_Details;
 private String Book_Details;
 private String Other_Stock_Details;
 //
 // Constructors
 //
 public Central_Library_Database () { };
 //
 // Methods
 //
 //
 // Accessor methods
 //
 /**
  * Set the value of Borrower_Details
  * @param newVar the new value of Borrower_Details
  */
 private void setBorrower_Details (String newVar) {
  Borrower_Details = newVar;
 }
 /**
  * Get the value of Borrower_Details
  * @return the value of Borrower_Details
  */
 private String getBorrower_Details () {
  return Borrower_Details;
 }
 /**
  * Set the value of Book_Details
  * @param newVar the new value of Book_Details
  */
 private void setBook_Details (String newVar) {
  Book_Details = newVar;
 }
 /**
  * Get the value of Book_Details
  * @return the value of Book_Details
  */
 private String getBook_Details () {
  return Book_Details;
 }
 /**
  * Set the value of Other_Stock_Details
  * @param newVar the new value of Other_Stock_Details
  */
 private void setOther_Stock_Details (String newVar) {
  Other_Stock_Details = newVar;
 }
 /**
  * Get the value of Other_Stock_Details
  * @return the value of Other_Stock_Details
  */
 private String getOther_Stock_Details () {
  return Other_Stock_Details;
 }
 //
 // Other methods
 //
 /**
  */
 public void Borrower_Info()
 {
 }
 /**
  */
```

```java
  public void Maintain_Book_Details()
  {
  }
  /**
   */
  public void Update_Book_Details()
  {
  }
}
/**
 * Class Book_Borrower
 */
public class Book_Borrower {
  //
  // Fields
  //
  private String General_Details;
  private String Book_Required;
  private String Book_Issued;
  private int Payment;
  //
  // Constructors
  //
  public Book_Borrower () { };
  //
  // Methods
  //
  //
  // Accessor methods
  //
  /**
   * Set the value of General_Details
   * @param newVar the new value of General_Details
   */
  private void setGeneral_Details (String newVar) {
    General_Details = newVar;
  }
  /**
   * Get the value of General_Details
   * @return the value of General_Details
   */
  private String getGeneral_Details () {
    return General_Details;
  }
  /**
   * Set the value of Book_Required
   * @param newVar the new value of Book_Required
   */
  private void setBook_Required (String newVar) {
    Book_Required = newVar;
  }
  /**
   * Get the value of Book_Required
   * @return the value of Book_Required
   */
  private String getBook_Required () {
    return Book_Required;
  }
  /**
   * Set the value of Book_Issued
   * @param newVar the new value of Book_Issued
   */
  private void setBook_Issued (String newVar) {
    Book_Issued = newVar;
  }
  /**
   * Get the value of Book_Issued
   * @return the value of Book_Issued
   */
  private String getBook_Issued () {
    return Book_Issued;
  }
  /**
   * Set the value of Payment
   * @param newVar the new value of Payment
```

```java
     */
     private void setPayment (int newVar) {
       Payment = newVar;
     }
     /**
      * Get the value of Payment
      * @return the value of Payment
      */
     private int getPayment () {
       return Payment;
     }
     //
     // Other methods
     //
     /**
      */
     public void Give_General_Details()
     {
     }
     /**
      */
     public void Intimate_Book_Required()
     {
     }
     /**
      */
     public void Inform_Book_Issued()
     {
     }
     /**
      */
     public void Do_the_payment_if_any()
     {
     }
}
/**
 * Class Librarian
 */
public class Librarian {
  //
  // Fields
  //
  private String Categorize_Details;
  private String Book_Information;
  private String Procedure_Protocal;
  private String Update_Database;
  //
  // Constructors
  //
  public Librarian () { };
  //
  // Methods
  //
  //
  // Accessor methods
  //
  /**
   * Set the value of Categorize_Details
   * @param newVar the new value of Categorize_Details
   */
  private void setCategorize_Details (String newVar) {
    Categorize_Details = newVar;
  }
  /**
   * Get the value of Categorize_Details
   * @return the value of Categorize_Details
   */
  private String getCategorize_Details () {
    return Categorize_Details;
  }
  /**
   * Set the value of Book_Information
   * @param newVar the new value of Book_Information
   */
  private void setBook_Information (String newVar) {
```

```java
  Book_Information = newVar;
}
/**
 * Get the value of Book_Information
 * @return the value of Book_Information
 */
private String getBook_Information () {
  return Book_Information;
}
/**
 * Set the value of Procedure_Protocal
 * @param newVar the new value of Procedure_Protocal
 */
private void setProcedure_Protocal (String newVar) {
  Procedure_Protocal = newVar;
}
/**
 * Get the value of Procedure_Protocal
 * @return the value of Procedure_Protocal
 */
private String getProcedure_Protocal () {
  return Procedure_Protocal;
}
/**
 * Set the value of Update_Database
 * @param newVar the new value of Update_Database
 */
private void setUpdate_Database (String newVar) {
  Update_Database = newVar;
}
/**
 * Get the value of Update_Database
 * @return the value of Update_Database
 */
private String getUpdate_Database () {
  return Update_Database;
}
//
// Other methods
//
/**
 */
public void Store_Collect_the_Book_Borrower_info()
{
}
/**
 */
public void Update_Book_Borrowed_info()
{
}
/**
 */
public void Rules_to_be_followed()
{
}
/**
 */
public void Keep_the_database_update()
{
}
}
```