**Instructions**

* This Assignment covers the following topic(s).
  + Entity Framework Core
  + CRUD Operations

**Scenario : CN Bank**

CN Bank helps customers to deposit amount in their banks which are tied up with them. CN Bank requested for an application which registers bank details and account information who have deposited amount in different registered banks.

**Functionalities**

* Add the bank details to database.
* Add Account details to the database.

1. Create table tblBank with following columns

|  |  |  |
| --- | --- | --- |
| **Property Name** | **Data Type** | **Rules** |
| IFSc\_Code | varchar | The field is the primary Key field and should not allow null values. |
| Bank\_Name | varchar | This field should not allow null values. |
| Branch\_Name | varchar | This field should not allow null values. |
| AccountNo | bigint | Foreign key |

1. Create a tblAccounts table with following columns:-

|  |  |  |
| --- | --- | --- |
| **Property Name** | **Data Type** | **Rules** |
| Account\_No | bigInt | This field should not allow null value. Should be using primary Key. |
| IFSC\_Code | varchar | This field should not allow null values. |
| Customer\_Name | varchar | This field should not allow null values. |
| Account\_Type | varchar | This field should not allow null values. |
| Registration\_Date | DateTime | The field should not allow null value. |
| Activation\_Date | DateTime | The field should not allow null value. |
| Deposite\_Amount | Double | The field should not allow null value. |
| Interest | int | This field should not allow null values. |

**Use the Scaffold-Dbcontext command in package manager console for converting the tables into Model classes inside the Models folder.**

1. Create a class called **BankManager** with the following method:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Method Name** | **Argument** | **Return Type** | **Access Specifier** | **Responsibilities** |
| GeneratePassCode | Int | string | Public | This method takes the account number as input and returns a passcode which is generated as first three letters of customer name , then two letters of bank name and last 5 digits of account\_no |
| GetTotalInterestPaid | String | double | Public | The method takes the bank name as input and finds the total interest amount paid by the bank to all the customers so far for their deposit amount.. |

1. Create a class called **BankManagerRepository** with the below methods:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Method Name** | **Argument** | **Return Type** | **Access Specifier** | **Responsibilities** |
| AddBank | BankModel bank | Int | public | This method will allow to add bank details to database table |
| GetBanks |  | List<BankModel> | public | This method will return all the Bank details. |
| AddAccounts | AccountModel account | Int | public | This method has to add the account details in the database.  **Note :**  Don’t add account if  IFSC code is not present. Return -2 and display No Such Bank is not Available. |

**Note : Declare all mentioned class as public.**

1. Class **Program**

Implement the Main method For Adding the Bank details, Displaying the bank details, adding account .

-