# Assignment 1

1. ***COLLEGE LIBRARY***
   * **LIBRARY**
     1. List of Books
   * **Book**
     1. Book ID
     2. Title
     3. Author
     4. Publisher
   * **Librarian** 
     1. Name
     2. Employee ID
   * **Issued Book**
     1. Date of issue
     2. Book ID
     3. Borrower
   * **Borrower**
     1. Type
     2. Borrower’s ID
2. ***CLASSROOM***
   * **Classroom**
     1. Whiteboard
     2. Desk
     3. Bench
   * **Student**
     1. Roll no.
     2. Name
   * **Teacher**
     1. Name
     2. Department
     3. Expertise

# Assignment 2

* Facebook Account
  + Attributes
    - Name
    - Password
    - Email id
    - User name
    - Profile Picture
    - Cover Photo
    - Date of Birth
    - Friends
    - Relationship Status
    - Liked Pages
    - Following
    - Followers
  + Behaviours
    - Upload Photo
    - Upload Status
    - Send Friend Request
    - Accept Friend Request
    - Message Someone
    - View timeline
    - Delete Post/Photo
    - Report
    - Block
* Bank Account
  + Attributes
    - Name
    - Address
    - PAN number
    - Aadhar number
    - Balance
    - Deposit history
    - Withdrawal history
    - Loan
    - Credit score
  + Behaviours
    - Update Account
    - Deposit
    - Withdraw
    - Close Account
* Employee
  + Attributes
    - Name
    - Address
    - Job Description
    - Title
    - Salary
    - Phone number
  + Behaviours
    - Check in
    - Give Appraisals
    - Do work
    - Attend meetings
    - Take salary
    - Report to HR
    - Check out

# Assignment 3:

Customer: id, name, mobile number, email id

Product: id, name, price, description, image path (since image will be separately stored)

Shopping Cart:

List of Ordered\_item

Ordered\_item:Product id, product name, price, quantity

Order

Order id

Date of purchase

Shipping address

Customer id or Customer depending on design/logic

List of Ordered\_item

# Assignment 4:

**CODE:**

class Employee:

def \_\_init\_\_(self,first\_name,last\_name,pay):

self.first\_name=first\_name

self.last\_name=last\_name

self.pay=pay

self.email=first\_name+"."+last\_name+"@company.com"

def print(self):

print(emp1.first\_name + '\n' + emp1.last\_name + '\n' + emp1.email + '\n' + str(emp1.pay))

emp1=Employee("Mohandas","Gandhi",5000)

emp1.print()

**OUTPUT:**

Mohandas

Gandhi

Mohandas.Gandhi@company.com

5000

# Assignment 5:

**Code:**

class Employee:

def \_\_init\_\_(self,first\_name,last\_name,pay):

#self creates a variable for that specific instance

self.first\_name=first\_name

self.last\_name=last\_name

self.pay=pay

self.email=first\_name+"."+last\_name+"@company.com"

def getEmail(self):

return self.email

def getFullName(self):

return self.first\_name+" "+self.last\_name

def getPay(self):

return self.pay

emp1=Employee("Mohandas","Gandhi",5000)

print(emp1.getEmail())

print(emp1.getFullName())

print(emp1.getPay())

**Output:**

Mohandas.Gandhi@company.com

Mohandas Gandhi

5000

# Assignment 6:

The balance can be set to very high/low value accidentally. (#stmt1)

The balance can be accessed or changed by user of the class.

The balance can be set to non-permitted value (#stmt2)

Make balance a private variable ( \_\_balance)

def \_\_init\_\_(self, initial\_amount):

self.\_\_balance = initial\_amount

# Assignment 7:

**Code:**

class Dog:

def \_\_init\_\_(self,name):

self.name=name

self.tricks = []

def add\_trick(self,trick):

self.tricks.append(trick)

d=Dog('Fido')

e=Dog('Buddy')

d.add\_trick('roll over')

e.add\_trick('play dead')

print(d.tricks)

print(e.tricks)

**Output:**

['roll over']

['play dead']