1. Create a class Customer Loan according to the given class diagram.

## Customer

- customerId: int

- customerName : String- dateOfBirth : LocalDate

contactNumber : String
emailAddress : String

- monthlyIncome : double

- profession : String

- totalMonthlyExpenses: double

designation : StringcompanyName: String

+ calculateDBR(): double

+ calculateMaxEligibleEMI(): double

2. Create a class Loan according to the given class diagram.

## Loan

- loanld: int
- IoanType: String
- IoanAmount: double
- tenure: int
- roi: double
- IoanStatus : enum
- emiPerMonth: double
- IoanDisbursalDate: LocalDate
- maxEligibleLoanAmount: double
- repaymentFrequency: int
- + calculateEMI(): void
- + generateRepaymentSchedule(): void
- + calculateLatePenalty(currentDate) : double
- + calculateEligibleLoanAmount(): void
- 3. Add the functionality of automatically generating Loan Id and Customer Id in Loan class and Customer class respectively. The series for both Id's should start from 1.
- 4. Validation Functions assignment Assignment 2.1 Validation Functions.pdf