

```

package emiCal;

import java.time.LocalDate;

public class AccountDetails {
    private long accountNo;
    private String accountHolderName;
    private double accountBalance;
    private String address;
    private LocalDate dateOfBirth;
    public long getAccountNo() {
        return accountNo;
    }
    public String getAccountHolderName() {
        return accountHolderName;
    }
    public double getAccountBalance() {
        return accountBalance;
    }
    public String getAddress() {
        return address;
    }
    public LocalDate getDateOfBirth() {
        return dateOfBirth;
    }
    public void setAccountNo(long accountNo) {
        this.accountNo = accountNo;
    }
    public void setAccountHolderName(String accountHolderName) {
        this.accountHolderName = accountHolderName;
    }
    public void setAccountBalance(double accountBalance) {
        this.accountBalance = accountBalance;
    }
    public void setAddress(String address) {
        this.address = address;
    }
}

```

I

```

35 public void setAddress(String address) {
36     this.address = address;
37 }
38 public void setDateOfBirth(LocalDate dateOfBirth) {
39     this.dateOfBirth = dateOfBirth;
40 }
41
42
43 public AccountDetails() {
44     super();
45 }
46 public AccountDetails(long accountNo, String accountHolderName, double accountBalance, String address) {
47     super();
48     this.accountNo = accountNo;
49     this.accountHolderName = accountHolderName;
50     this.accountBalance = accountBalance;
51     this.address = address;
52 }
53 @Override
54 public String toString() {
55     return "AccountDetails [accountNo=" + accountNo + ", accountHolderName=" + accountHolderName
56         + ", accountBalance=" + accountBalance + ", address=" + address + "]\n";
57 }
58
59 }

```

Writable

Smart Insert

30:52:740



Search




```

3 public class Loan {
4     private LoanType typeOfLoan;
5     private double loanAmount;
6     private int noOfMonths;
7     public LoanType getTypeOfLoan() {
8         return typeOfLoan;
9     }
10    public double getLoanAmount() {
11        return loanAmount;
12    }
13    public int getNoOfMonths() {
14        return noOfMonths;
15    }
16    public void setTypeOfLoan(LoanType typeOfLoan) {
17        this.typeOfLoan = typeOfLoan;
18    }
19    public void setLoanAmount(double loanAmount) {
20        this.loanAmount = loanAmount;
21    }
22    public void setNoOfMonths(int noOfMonths) {
23        this.noOfMonths = noOfMonths;
24    }
25    public Loan(LoanType typeOfLoan, double loanAmount, int noOfMonths) {
26
27        this.typeOfLoan = typeOfLoan;
28        this.loanAmount = loanAmount;
29        this.noOfMonths = noOfMonths;
30    }
31    public Loan() {
32
33    }
34    @Override
35    public String toString() {
36        return "Loan [typeOfLoan=" + typeOfLoan + ", loanAmount=" + loanAmount + ", noOfMonths=" + noOfMonths + "]";
37    }
38

```

```
2  
3 public enum LoanType {  
4 CAR_LOAN, HOME_LOAN, PERSONAL_LOAN;  
5 }  
6
```

I

```
1 package emiCal;
2
3 import java.time.LocalDate;
4
5
6
7
8 public class EmiCalculator {
9     public static Boolean isEligibleForLoan(Loan loan, AccountDetails acc) {
10
11         if(acc.getAccountBalance() < (25/100)*loan.getLoanAmount()) {
12             return false;
13
14         }else {
15             return true;
16         }
17
18     }
19
20     public static double calculateEmi(Loan loan) {
21
22         Integer interest = 0;
23         double emiValue = (loan.getLoanAmount()/loan.getNoOfMonths())+(interest*100)/loan.getLoanAmount();
24         if(loan.getLoanAmount() < 500000) {
25             if(loan.getTypeOfLoan() == LoanType.CAR_LOAN) {
26                 interest = 8;
27                 return emiValue;
28             }else if (loan.getTypeOfLoan() == LoanType.HOME_LOAN) {
29                 interest = 9;
30                 return emiValue;
31             }
32             else if (loan.getTypeOfLoan() == LoanType.PERSONAL_LOAN) {
33                 interest = 10;
34                 return emiValue;
35             }
36
37         }
38         else if (loan.getLoanAmount() > 500000 && loan.getLoanAmount() < 1000000) {
39             if(loan.getTypeOfLoan() == LoanType.CAR_LOAN) {
```



```

38     else if (loan.getLoanAmount() > 500000 && loan.getLoanAmount() < 1000000) {
39         if (loan.getTypeOfLoan() == LoanType.CAR_LOAN) {
40             interest = 11;
41             return emiValue;
42         } else if (loan.getTypeOfLoan() == LoanType.HOME_LOAN) {
43             interest = 12;
44             return emiValue;
45         }
46         else if (loan.getTypeOfLoan() == LoanType.PERSONAL_LOAN) {
47             interest = 13;
48             return emiValue;
49         }
50     }
51 }
52 else if (loan.getLoanAmount() > 1000000 && loan.getLoanAmount() < 2000000) {
53     if (loan.getTypeOfLoan() == LoanType.CAR_LOAN) {
54         interest = 14;
55         return emiValue;
56     } else if (loan.getTypeOfLoan() == LoanType.HOME_LOAN) {
57         interest = 15;
58         return emiValue;
59     }
60     else if (loan.getTypeOfLoan() == LoanType.PERSONAL_LOAN) {
61         interest = 16;
62         return emiValue;
63     }
64 }
65 }
66 } else {
67     if (loan.getTypeOfLoan() == LoanType.CAR_LOAN) {
68         interest = 20;
69         return emiValue;
70     } else if (loan.getTypeOfLoan() == LoanType.HOME_LOAN) {
71         interest = 21;
72         return emiValue;
73     }

```

```

        return emiValue;
    }
    else if (loan.getTypeOfLoan() == LoanType.PERSONAL_LOAN) {
        interest = 22;
        return emiValue;
    }
}
return emiValue;
}

public static Boolean isValidAccountHolderDOB(LocalDate dateOfBirth) {
    LocalDate date = LocalDate.of(2022, 12, 20);
    int age = Period.between(dateOfBirth, date).getYears();
    if (age > 21 && age < 41) {
        return true;
    } else {
        return false;
    }
}

}

public static void main(String[] args) {
    Scanner sc = new Scanner(System.in);
    AccountDetails accl = new AccountDetails(sc.nextLong(), sc.next(), sc.nextDouble(), sc.next());
    String dateOfBirthInString = sc.next();
    DateTimeFormatter formatter = DateTimeFormatter.ofPattern("d/MM/yyyy");
    LocalDate dateOfBirth = LocalDate.parse(dateOfBirthInString, formatter);
    Loan loan = new Loan(LoanType.valueOf(sc.next().toUpperCase()), sc.nextDouble(), sc.nextInt());
    if (isValidAccountHolderDOB(dateOfBirth) && isEligibleForLoan(loan, accl)) {
        System.out.printf("EMI is: %.2f\n", calculateEmi(loan));
    } else {
        System.out.println("Sorry!! you are not eligible to get a loan");
    }
    sc.close();
}

```

I


```

EmiCalculator.java x AccountDetails.java Loan.java Main.java LoanType.java
86     int age = Period.between( dateOfBirth,date).getYears();
87     if(age >21 && age <41) {
88         return true;
89     }else {
90         return false;
91     }
92
93 }
94 public static void main(String[] args) {
95     Scanner sc = new Scanner(System.in);
96     AccountDetails accl= new AccountDetails(sc.nextLong(), sc.next(), sc.nextDouble(), sc.next());
97     String dateOfBirthInString=sc.next();
98     DateTimeFormatter formattermatter = DateTimeFormatter.ofPattern("d/MM/yyyy");
99     LocalDate dateOfBirth= LocalDate.parse(dateOfBirthInString,formattermatter);
100     Loan loan = new Loan(LoanType.valueOf(sc.next().toUpperCase()), sc.nextDouble(), sc.nextInt());
101     if(isValidAccountHolderDOB(dateOfBirth) && isEligibleForLoan(loan, accl)) {
102         System.out.printf("EMI is: %.2f%n",calculateEmi(loan));
103     }else {
104         System.out.println("Sorry!! you are not eligible to get a loan");
105     }
106     sc.close();
107
108 }
109
110
111 }
112
113
114 //10001001
115 //john
116 //200000
117 //Boston
118 //12/01/2005
119 //Car_Loan
120 //15000
121 //72

```