



Bank System		
Variable Name	Type	Description
accounts	List<Account>	Stores all accounts
branchName	String	Branch name
branchAddress	String	Branch full address
managerName	String	Branch manager
Method	Type	Meaning
main(String[] args)	Static	Entry point -> runs the banking system simulation
createAccount()	Normal	Open a new bank account and store it in the system.
closeAccount()	Normal	Mark an account as closed.
generateDailyReport()	Normal	Print all transactions of the day in a tabular report.

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Transaction Account		
Variable Name	Type	Description
transactionId	String	Unique transaction reference ID
type	String	Transaction type (Deposit / Withdraw / Interest / ...)
amount	long	Transaction amount
dateTime	LocalDateTime	Date & time of transaction
mode	String	Cash / Cheque / NEFT / UPI / RTGS
performedBy	String	Teller / ATM / Online Banking
remarks	String	Additional notes
Method	Type	Meaning
displayTransaction()	Normal	Format transaction details (date, type, amount) into a

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Account
Abstract class

Variable Name	Type	Description
accountNumber	long	Unique account number
accountHolder	String	Full name of account holder
balance	long	Current account balance
createdAt	LocalDateTime	Account creation date & time
branchCode	String	Branch identifier
ifscCode	String	IFSC for electronic transfers
status	String	Active / Frozen / Closed
transactions	List<TransactionAccount>	All account transactions
contactNumber	String	Customer's mobile number
emailId	String	Customer's email address
Method	Type	Meaning
deposit(long amount)	Abstract	Add money to the account (implementation depends on
withdraw(long amount)	Abstract	Take money out (rules vary by account type).
calculateInterest()	Abstract	Calculate interest (Savings earns, Loan accrues, Current
generateReport()	Abstract	Print/report all transactions and account status.
getBalance()	Normal	Return the current balance.
addTransaction(String type,	Normal	Record a transaction with date/time.

LocalDateTime include inside
Account

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Saving Account		
Variable Name	Type	Description
MIN_BALANCE	long	Minimum balance < 10000
interestRate	double	Annual interest rate
nomineeName	String	Nominee for the account
panNumber	String	PAN of account holder
Method	Type	Meaning
deposit(long amount)	Override	Add money and update balance.
withdraw(long amount)	Override	Deduct money if balance > MIN_BALANCE.
calculateInterest()	Override	Add annual interest (e.g., 4%).
generateReport()	Override	Show full savings account details & transactions.

Salary Account		
Variable Name	Type	Description
employerName	String	Linked employer/company
salaryCreditDate	LocalDateTime	Last salary credit date
lastTransactionDate	LocalDateTime	Last activity
inactiveMonthsLimit	int	Freeze if > 2 months
Method	Type	Meaning
deposit(long amount)	Override	Add money (salary)
withdraw(long amount)	Override	Withdraw money
checkInactive()	New	Freezes the account if no

Current Account		
Variable Name	Type	Description
overdraftLimit	long	Max overdraft allowed
businessName	String	Business entity name
gstNumber	String	Business GST number
tradeLicenseNo	String	Business trade license number
Method	Type	Meaning
deposit(long amount)	Override	Add funds to account.
withdraw(long amount)	Override	Allow withdrawal even if balance goes negative (up to overdraft limit).
calculateInterest()	Override	Usually no interest for current accounts.
generateReport()	Override	Show account details including overdraft usage.

Loan Account		
Variable Name	Type	Description
loanAmount	long	Initial loan taken
interestRate	double	Annual loan interest rate
loanType	String	Home / Car / Personal etc.
loanTenure	int	Tenure in months/years
dueDate	LocalDateTime	Next EMI due date
emiAmount	long	Fixed monthly installment
Method	Type	Meaning
deposit(long amount)	Override	Repay loan -> decreases outstanding loan balance.
withdraw(long amount)	Override	Not allowed (loans only decrease).
calculateInterest()	Override	Add interest on unpaid (negative) balance.
generateReport()	Override	Show outstanding loan, EMI schedule, and repayments.