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Course: Btech CSE AI/ML
Section : B

Assignment Number :1
Banking Application for Account Management

Code:

```
class BankAccount {  
  
    static String bankName;  
    static long baseAccountNumber;  
  
    String accountHolder;  
    long accountNumber;  
    double balance;  
    String email;  
    String phoneNumber;  
  
    static {  
        bankName = "KRMU Bank";  
        baseAccountNumber = 1000000000L;  
        System.out.println("Static Block: Bank system initialized  
for " + bankName);  
    }  
  
    {
```

```
        accountNumber = ++baseAccountNumber;
        System.out.println("Instance Block: Generated account
number = " + accountNumber);
    }
```

```
    BankAccount(String holderName, double initialDeposit,
String email, String phoneNumber) {
        accountHolder = holderName;
        balance = initialDeposit;
        this.email = email;
        this.phoneNumber = phoneNumber;
        System.out.println("Constructor: Account created for " +
holderName + " with ₹" + initialDeposit);
    }
```

```
    public void deposit(double amount) {
        if (amount > 0) {
            balance += amount;
            System.out.println("Deposit of ₹" + amount + "
successful.");
        } else {
            System.out.println("Invalid deposit amount.");
        }
    }
```

```
    public void withdraw(double amount) {
        if (amount > 0 && amount <= balance) {
            balance -= amount;
            System.out.println("Withdrawal of ₹" + amount + "
successful.");
        } else {
```

```
        System.out.println("Insufficient balance or invalid  
amount.");  
    }  
}
```

```
    public void updateContact(String newEmail, String  
newPhone) {  
        email = newEmail;  
        phoneNumber = newPhone;  
        System.out.println("Contact details updated  
successfully.");  
    }
```

```
    public void checkBalance() {  
        System.out.println("Current Balance for " + accountHolder  
+ ": ₹" + balance);  
    }
```

```
    public void showDetails() {  
        System.out.println("\n--- Account Details ---");  
        System.out.println("Bank Name      : " + bankName);  
        System.out.println("Account Holder : " + accountHolder);  
        System.out.println("Account Number : " +  
accountNumber);  
        System.out.println("Balance      : ₹" + balance);  
        System.out.println("Email        : " + email);  
        System.out.println("Phone Number : " + phoneNumber);  
        System.out.println("-----");  
    }
```

```
    public static void main(String[] args) {
```

```

        BankAccount acc1 = new BankAccount("Chirag Sharma",
98341, "chiragkrmu@gmail.com", "9876543210");
        acc1.deposit(1500);
        acc1.withdraw(2000);
        acc1.checkBalance();
                acc1.updateContact("chiragkrmu@gmail.com",
"9998887776");
        acc1.showDetails();

        BankAccount acc2 = new BankAccount("Saurav Kumar",
8000, "saurav3212@gmail.com", "9123456780");
        acc2.withdraw(1000);
        acc2.deposit(3000);
        acc2.checkBalance();
        acc2.showDetails();
    }
}

```

Output:

Static Block: Bank system initialized for KRMU Bank

Instance Block: Generated account number = 1000000001

Constructor: Account created for Chirag Sharma with ₹98341.0

Deposit of ₹1500.0 successful.

Withdrawal of ₹2000.0 successful.

Current Balance for Chirag Sharma: ₹97841.0

Contact details updated successfully.

--- Account Details ---

Bank Name : KRMU Bank

Account Holder : Chirag Sharma

Account Number : 1000000001

Balance : ₹97841.0

Email : chiragkrmu@gmail.com

Phone Number : 9998887776

Instance Block: Generated account number = 1000000002

Constructor: Account created for Saurav Kumar with ₹8000.0

Withdrawal of ₹1000.0 successful.

Deposit of ₹3000.0 successful.

Current Balance for Saurav Kumar: ₹10000.0

--- Account Details ---

Bank Name : KRMU Bank

Account Holder : Saurav Kumar

Account Number : 1000000002

Balance : ₹10000.0

Email : saurav3212@gmail.com

Phone Number : 9123456780
