

## Static Members in Java

Write a Java program to create a class called "BankAccount" with instance variables 'accountNumber' and balance, and static variables 'bankName' and 'interestRate'. Provide static methods to get and set the static variables. Create several 'BankAccount' objects and print their details along with the static variables.

Solution:

```
package StaticMember;

public class BankAccount {

    // Instance variables
    private String accountNumber;
    private double balance;

    // Static variables
    private static String bankName;
    private static double interestRate;

    // Constructor to initialize instance variables
    public BankAccount(String accountNumber, double balance) {
        this.accountNumber = accountNumber;
        this.balance = balance;
    }

    // Getters and Setters for static variables
    public static String getBankName() {
        return bankName;
    }

    public static void setBankName(String bankName) {
        this.bankName = bankName;
    }

    public static double getInterestRate() {
        return interestRate;
    }

    public static void setInterestRate(double interestRate) {
        this.interestRate = interestRate;
    }
}
```

```
// Static method to get the bank name
public static String getBankName() {
    return bankName;
}

// Static method to set the bank name
public static void setBankName(String name) {
    bankName = name;
}

// Static method to get the interest rate
public static double getInterestRate() {
    return interestRate;
}

// Static method to set the interest rate
public static void setInterestRate(double rate) {
    interestRate = rate;
}

// Method to print the details of the BankAccount object
public void printDetails() {
    System.out.println("Account Number: " + accountNumber);
    System.out.println("Balance: " + balance);
    System.out.println("Bank Name: " + bankName);
    System.out.println("Interest Rate: " + interestRate + "%");
}
```

```
}

public class Main {
    public static void main(String[] args) {
        // Set static variables
        BankAccount.setBankName("National Bank");
        BankAccount.setInterestRate(3.5);

        // Create BankAccount objects
        BankAccount account1 = new BankAccount("123456789", 1000.00);
        BankAccount account2 = new BankAccount("987654321", 2000.00);

        // Print details of each BankAccount object
        account1.printDetails();
        System.out.println();
        account2.printDetails();
    }
}
```

Output - JavaApplication14 (run)

```
run:
Account Number: 123456789
Balance: 1000.0
Bank Name: National Bank
Interest Rate: 3.5%

Account Number: 987654321
Balance: 2000.0
Bank Name: National Bank
Interest Rate: 3.5%
BUILD SUCCESSFUL (total time: 0 seconds)
```