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:

```java
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;
    }
    // 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);
```

```java
        System.out.println("Interest Rate: " + interestRate + "%");
    }


}

public class Main {
public static void main(String[] args) {
    // Set static variables
    BankAccount.setBankName("Rupali Bank");
    BankAccount.setInterestRate(5.5);
    // Create BankAccount objects
    BankAccount account1 = new BankAccount("245681012", 5000.00);
    BankAccount account2 = new BankAccount("210186542", 10000.00);
    // Print details of each BankAccount object
    account1.printDetails();
    System.out.println();
    account2.printDetails();
 }

}
```

Output - Static Member (run) ×

```
run:
Account Number: 245681012
Balance: 5000.0
Bank Name: Rupali Bank
Interest Rate: 5.5%

Account Number: 210186542
Balance: 10000.0
Bank Name: Rupali Bank
Interest Rate: 5.5%
BUILD SUCCESSFUL (total time: 0 seconds)
```