Scala Programming

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Question:

Write a Scala program that creates a class BankAccount with properties accountNumber and balance. Implement methods to deposit and withdraw money from the account.

Code:

```
class BankAccount(val accountNumber: String, var balance: Double) {
def deposit(amount: Double): Unit = {
balance += amount
println(s"Deposited $amount. New balance: $balance")
def withdraw(amount: Double): Unit = {
if (amount <= balance) {
balance -= amount
println(s"Withdrew $amount. New balance: $balance")
}
else
println(s"Want to withdraw $amount? Insufficient balance!")
}
}
object BankAccountApp {
def main(args: Array[String]): Unit = {
val account = new BankAccount("SB-1234", 1000.0)
println(s"Account Number: ${account.accountNumber}")
println(s"Initial Balance: ${account.balance}")
account.deposit(500.0)
account.withdraw(200.0)
account.withdraw(2000.0)
}
}
```

Output:

```
HelloWorld.scala
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                                                                                                                    NEW
                                                                                                                                 SCALA 🗸
                                                                                                                                                     RUN >
     class BankAccount(val accountNumber: String, var balance: Double) {
  def deposit(amount: Double): Unit = {
      balance += amount
println(s"Deposited $amount. New balance: $balance")
                                                                                                                             Input for the program (Optional)
      }
def withdraw(amount: Double): Unit = {
  if (amount <= balance) {
  balance -= amount
  println(s"Withdrew $amount. New balance: $balance")
}</pre>
                                                                                                                            Output:
                                                                                                                            Account Number: SB-1234
      println(s"Want to withdraw $amount? Insufficient balance!")
                                                                                                                            Initial Balance: 1000.0
                                                                                                                           Deposited 500.0. New balance: 1500.0
                                                                                                                           Withdrew 200.0. New balance: 1300.0
                                                                                                                           Want to withdraw 2000.0? Insufficient
     Jobject BankAccountApp {
  def main(args: Array[String]): Unit = {
    val account = new BankAccount("SB-1234", 1000.0)
    println(s"Account Number: ${account.accountNumber.}
      println(s"Initial Balance: ${account.balance}")
account.deposit(500.0)
account.withdraw(200.0)
account.withdraw(2000.0)
```

This program is used to find the balance of a bank account after depositing or withdrawing a specific amount of money. A class "BankAccount" is created and attributes like account number and balance are passed. Inside the class, there are 2 functions, deposit and withdraw. If the user intends to deposit money into the account, then the function deposit adds the new amount to the balance and prints it out. If the user wants to withdraw a specific amount, then first it is checked whether there's sufficient balance existing in the account. If it is available, then the money is deduced from the balance and the new balance is printed out. Otherwise, the user is informed that there's not enough balance in the account. An object is created as an instance of the class and deposit and withdraw functions are called as required.

Github link:

https://github.com/niranjana628/Scala-Programming