Problem 1# The Account Class

1. **Account.java:**

public class Account {  
 //attributes  
 private String id;  
 private String name;  
 private int balance = 0;  
  
 // constructors  
  
 public Account(){  
 this.id = "no id";  
 this.name = "no name";  
 this.balance = 0;  
 }  
 public Account(String id, String name){  
 this.id = id;  
 this.name = name;  
 }  
  
 public Account(String id, String name, int balance){  
 this.id = id;  
 this.name = name;  
 this.balance = balance;  
 }  
 // getters setters  
  
 public String getId() {  
 return id;  
 }  
  
 public String getName(){  
 return name;  
 }  
  
 public int getBalance() {  
 return balance;  
 }  
  
  
 // methods  
 public int credit(int amount){  
 this.balance = this.balance + amount;  
 return this.balance;  
 }  
  
 public int debit(int amount){  
 if (amount <= balance){  
 this.balance = this.balance - amount;  
 }  
 else {  
 System.*out*.println("Amount exceeded balance");  
 }  
  
 return this.balance;  
 }  
  
 public int transferTo(Account another, int amount) {  
 if (amount <= this.balance) {  
 this.balance -= amount;  
 another.balance += amount;  
  
 } else {  
 System.*out*.println("Amount exceeded balance");  
 }  
 return (balance);  
 }  
  
 // to String  
 public String toString() {  
 return ("AccountID: " + this.id + " Account Name: " + this.name + " Balance: " + this.balance);  
 }  
}

1. **TestAccount.java:**

public class TestAccount {  
 public static void main(String[] args) {  
 Account A1 = new Account("SIBL0012", "Acc1", 5000);  
  
 Account A2 = new Account("SIBL0013", "Acc2", 4000);  
  
 System.*out*.println("Current Balance of " + A1.getName() + " is "+A1.getBalance());  
 System.*out*.println("Current Balance of " + A2.getName() + " is "+A2.getBalance());  
  
 System.*out*.println("\nTransferring $1000 from " + A1.getName() + " to " + A2.getName() + "...\n");  
 A1.transferTo(A2, 1000);  
  
 // Display updated balances  
 System.*out*.println("Balance after transfer of " + A1.getName() + " is "+A1.getBalance());  
 System.*out*.println("Balance after transfer of " + A2.getName() + " is "+A2.getBalance());  
 }  
  
}

1. **Output:**

A screenshot of a computer

Description automatically generated

Problem2#