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

Problem 2# The Date Class

1. **Date.java:**

public class Date {  
 //attributes  
 private int day;  
 private int month;  
 private int year;  
 //constructors  
 public Date(int day, int month, int year){  
 this.day = day;  
 this.month = month;  
 this.year = year;  
 }  
  
 //getters & setters  
  
 public int getDay() {  
 return day;  
 }  
 public int getMonth() {  
 return month;  
 }  
 public int getYear() {  
 return year;  
 }  
  
 public void setDay(int day) {  
 this.day = day;  
 }  
 public void setMonth(int month) {  
 this.month = month;  
 }  
 public void setYear(int year) {  
 this.year = year;  
 }  
 public void setDate(int day, int month, int year){  
 this.day = day;  
 this.month = month;  
 this.year = year;  
 }  
 //methods  
  
 //toString  
 public String toString() {  
 return String.*format*("Formatted Date: " + "%02d/%02d/%d", day, month, year);  
 }  
}

1. **TestDate.java:**

public class TestDate {  
 public static void main(String[] args) {  
 Date D1 = new Date(5,3,1990);  
 Date D2 = new Date(13,13,2024);  
 System.*out*.println(D1);  
 System.*out*.println(D2);  
 }  
}

1. **Output:**

A screenshot of a computer

Description automatically generated

Problem 2# The Time Class

1. **Time.java:**
2. **TestTime.java**
3. **Output**