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| **LAB221 Assignment** | **Type:** | **Short Assignment** |
| **Code:** | **J2.S.P0003** |
| **LOC:** | **31** |
| **Slot(s):** | **1** |

**Title**

Banking services – transferring money

**Background Context**

A bank provides various banking services. Its services include receiving deposits of money, lending money and processing transactions. The process of transferring money from one account to another while maintaining the same total value.

**Program Specifications**

Create an application using Threads to implement the application. The application should consist of the following classes:

**1. CustomerAccount.java**

Used to store the information of an account, such as **account type** and **balance amount** for the customer account.

Create a getter method named getAccountType() to retrieve the account type of the customer. Similarly, create another getter method named getBalance() to retrieve the balance amount of the customer. Further, create a setter method named setBalance() to set the balance amount of the customer.

**2. TransferManager.java**

The use of Runnable interface to transfer money from one account to another while maintaining the same total value over the two accounts.

The TransferManager class contains instance variable **transferCount** to store the count for the number of transfer instances that will take place.

The run() method is implemented in this class and when it is invoked, it transfers money from one account to another while maintaining the same total value over two accounts.

**3. Main.java**

Creation of Thread objects using Runnable interface to display the total balance before transfer and after transfer.

***Function details:***

1. Display a screen to prompt users to input information of 2 accounts.
2. Create two threads and initiate the execution of both the threads. Display the Total balance before transfer and after transfer where both the amount should be the same.

***Expectation of User interface:***

