

## Assignment 3

1. Write a java program to read and write an image file.

2. Create a class MyBank with following details-

*private double balance*

*public MyBank(double balance) // constructor*

*public void deposit(double amount)// to deposit amount*

*public void withdraw (double amount) // to withdraw*

*public double getBalance() // to fetch the balance of account*

Create another class MyTransaction, which is a thread class with following details-

*private MyBank account // Data member*

*private double amount // Data member*

*private boolean flag // Data member, it will be true for deposit and false for withdraw*

*public MyTransaction (MyBank account, double amount, boolean flag)// constructor*

Also override the run() method to call deposit() and withdraw() methods.

Create main thread where-

Create an object of Mybank with initial balance 1000 Rs. Also create two threads of MyTransaction class named as depositThread and withdrawThread, both must share the same object of Mybank class.

For deposit thread the flag value must be **true** and for **withdraw** thread it must be **false**. Ex-  
MyTransaction depositThread=new MyTransaction(account,500,true);// 500 amount to be deposited

MyTransaction withdrawThread=new MyTransaction(account,200,true);// 200 amount to be withdrawn

Write your program in such a way that, threads can call deposit and withdraw methods in any order but the final balance of account will be consistent. You must input the deposit and withdrawing amount from user.

**Note:** Provide the output for at least five different inputs.

3. Write a multithread based application, where one thread reads and shows all the palindromes and another shows length of every word written inside file.

**Note:** The output must be consistent.