Lab Assignment

Problem statement**:** Demonstrate following: Thread creation, member functions of Thread class, interthread communication.

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Solution:

class InterThreadDemo //This is main Thread

{

public static void main(String arg[])

{

final Customer c = new Customer();

new Thread()

{

public void run()

{

c.withdraw(25000);

}

}.start();

new Thread()

{

public void run()

{

c.deposit(10000);

}

}.start();

new Thread()

{

public void run()

{

c.deposit(10000);

}

}.start();

}

}

class Customer //this is second Thread

{

int amt = 20000;

synchronized void withdraw(int amt)

{

System.out.println("Available Balance " + this.amt);

System.out.println("Going to withdraw." + amt);

if (this.amt < amt)

{

System.out.println("Insufficient Balance Waiting for deposit.");

try

{

wait();

} catch (Exception e)

{

System.out.println("Interruption Occured");

}

}

this.amt -= amt;

System.out.println("Detected amaount: " + amt);

System.out.println("Balance amount : " + this.amt);

}

synchronized void deposit(int amt)

{

System.out.println("Going to deposit " + amt);

this.amt += amt;

System.out.println("Available Balance " + this.amt);

System.out.println("Transaction completed.\n");

notify();

}

}

