**PRACTICAL:27**

**AIM: Write a program in Java to demonstrate use of synchronization of**

**threads when multiple threads are trying to update common variable.**

**PROGRAM:**

class PrintDemo

{

public void printcount()

{

try

{

for(int i=5; i>0;i--)

{

System.out.println("Counter --- "+i);

}

}

catch(Exception e)

{

System.out.println("Thread interrupted.");

}

}

}

class ThreadDemo extends Thread

{

private Thread t;

private String threadName;

PrintDemo PD;

ThreadDemo(String name,PrintDemo pd)

{

threadName=name;

PD=pd;

}

public void run()

{

synchronized(PD)

{

PD.printcount();

}

System.out.println("Thread"+threadName+"exiting.");

}

public void start()

{

System.out.println("Starting"+threadName);

if(t==null)

{

t=new Thread(this,threadName);

t.start();

}

}

}

public class P27\_7059

{

public static void main(String args[])

{

PrintDemo PD=new PrintDemo();

ThreadDemo T1=new ThreadDemo("Thread - 1",PD);

ThreadDemo T2=new ThreadDemo("Thread - 2",PD);

T1.start();

T2.start();

//wait for thread to end

try

{

T1.join();

T2.join();

}

catch(Exception e)

{

System.out.println("Interrupted");

}

}

}

**OUTPUT:**

