**ITMD 411 Lecture 10-7-16**

**Lab 3 Comparators**

* Analyze females with mortgages
  + Sort off females **🡪 F vs M**
  + Sort off mortgages **🡪 N vs Y**
* Create class Records extends BankRecords

**Records.java:**

public class Records extends BankRecords

{

private static FileWriter fw =null;

public Records()

{

try

{

Fw= new FileWriter(“bankrecords.txt”);

}

catch(IOException e)

{

e.printStackTrace();

}

public static void main(String[] args)

{

// TODO Auto-Generated method stub

Records r = new Records();

r.readData();

femalesComparator();

}

public static void femalesComparator()

{

Arrays.sort(robjs, new FemaleComparator());

int fcount = 0;

for(int i =0; I < robjs.length; i++)

{

if(robjs[i].getSex().equals(“FEMALE”) && robjs[i].isMortgage().equals(“YES”))

{

fcount++;

System.out.println(robjs[i].getId() + “ “

+ robjs[i].getSex() + “ “

+ robjs[i].isMortgage());

}

}

System.out.println(“Total females: “ + fcount );

}

}

**FemaleComparator.java:**

public class FemaleComparator implements Comparator<BankRecords>

{

@Override

public int compare(BankRecords o1, BankRecords o2)

{

// TODO Auto-generated method stub

int result = o1.getSex().compareTo(o2.getSex()) &&;

if(result != 0) { return result; }

return o1.isMortgage().compareTo(o2.isMortgage()) ;

}

}