```java
/*
 * Countries of the World App 1.0
 * TransData.java "Transaction Data"
 * Waleed Gudah
 *
 */

import java.io.*;

public class TransData {

    private String country;
    private String code;
    private String key;
    private String continent;
    private int area;
    private int population;
    private float lifeExpectency;
    private int numOfTransactions;
    private File file;
    private DataInputStream dataIn;
    private TheLog tLog;
    private boolean doneWithInput;

    // ************************************************************//
    public TransData(int fileNumber, TheLog tLog) {

        this.tLog = tLog;

        file = new File("TransData" + fileNumber + ".txt");

        try {

            dataIn = new DataInputStream(

            new BufferedInputStream(new FileInputStream(file)));

        } catch (FileNotFoundException e1) {

            System.out.println("The file required could not be found "

            + "in the root path of this application");

        }

        tLog.statusFile("TransData FILE opened");

    }

    // ************************************************************//
    // This method handles transaction data, one record at a time*****//
    // It is called by UserApp and is passed one record at a time from TransData
    // class///
    public void transactionIn(String arg) {

        clear(); // Clears Global variable used in this method
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    if (!arg.isEmpty()) {

        key = arg.substring(0, 2);

        if (arg.startsWith("SA")) {

            numOfTransactions++;

            return;

        } else if (key.equals("IN") & !arg.substring(2).isEmpty()) {

            seperate(arg);

            numOfTransactions++;

        }

        else if ((key.equalsIgnoreCase("SN") || key.equalsIgnoreCase("DN"))
                & !arg.substring(2).isEmpty()) {

            arg = arg.substring(3);

            String[] fields = arg.split(",");

            fillFields(fields);

            numOfTransactions++;

        }

        else

            return;

    }

}

// ************************************************************//
public void seperate(String raw) {

    raw = raw.substring(34, raw.length() - 2); // Cut off the ends

    raw = raw.replace("'", "");

    String[] fields = raw.split(","); // Split the record up

    fillFields(fields);

}

// ************************************************************//
public void fillFields(String[] fields) {

    if (key.equalsIgnoreCase("IN")) {
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            code = fields[0];

            country = fields[1];

            continent = fields[2];

            area = Math.abs((int) Long.parseLong(fields[5]));

            population = Integer.parseInt(fields[6]);

            lifeExpectency = Float.parseFloat(fields[7]);

        }

        else if (key.equalsIgnoreCase("SN") || key.equals("DN")) {

            country = fields[0].trim();

        }

    }

    // ************************************************************//
    // This Method returns true if there is a record in the stream, else it
    // returns false//
    public boolean nextRecord() {

        try {

            transactionIn(dataIn.readLine());

        } catch (IOException e) {

            doneWithInput = true;

        }

        catch (NullPointerException f) {

            doneWithInput = true;

            return false;

        }

        return true;

    }

    // ************************************************************//
    // Resets fields within TransData before each new record//
    public void clear() {

        country = code = key = continent = "";

        area = population = (int) (lifeExpectency = 0);
```

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}

// ************************************************************//
public void finishUp() {

    tLog.statusCode("UserApp finished – " + numOfTransactions
            + " transactions processed");

    try {

        dataIn.close();

    } catch (IOException e) {

        System.out.println("Oops File Can NOT be closed");

    }

    tLog.statusFile("TransData FILE closed");
}

// ************************************************************//
public int getNumOfTransactions() {

    return numOfTransactions;

}

// ************************************************************//
public String getCountry() {

    return country;

}

// ************************************************************//
public String getKey() {

    return key;

}

// ************************************************************//
public String getCode() {

    return code;

}

// ************************************************************//
public String getContinent() {

    return continent;

}

// ************************************************************//
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```
    public int getArea() {

        return area;

    }

    // ***************************************************************//
    public int getPopulation() {

        return population;

    }

    // ***************************************************************//
    public float getLifeExpectency() {

        return lifeExpectency;

    }

    // ***************************************************************//
    public int getNumberOfTransactions() {

        return numOfTransactions;

    }

}
```