

## 1. A SOLUTION TO PP 7.8

This solution to PP 7.8, as discussed in class, can serve as a model for Program 10.

## 2. PROBLEM PP 7.8

Design and implement an application that reads a sequence of up to 25 pairs of names and postal (ZIP) codes for individuals. Store the data in an object designed to store a first name (string), last name (string), and postal code (integer). Assume each line of input will contain two strings followed by an integer value, each separated by a tab character. Then, after the input has been read in, print the list in an appropriate format to the screen.

## 3. THE CLASS PERSONALDATA

```
public class PersonalData{
    private String first;
    private String last;
    private int zip;
    public PersonalData(String f, String l, int z){
        first = f;
        last = l;
        zip = z;
    }
    public String toString(){
        return first + "\t" + last + "\t" + zip;
    }
}
```

## 4. THE CLASS DATAFILE

```
public class DataFile{
    private final int MAX_NUM = 25;
    private int num;
    private PersonalData dataArray[];
    public DataFile(){
        num = 0;
        dataArray = new PersonalData[MAX_NUM];
    }
    public void addPerson(PersonalData p){
        if (num<MAX_NUM){
            num++;
        }
    }
}
```

```
        dataArray[num-1] = p;
    }
}
public String toString(){
    String ret="";
    for (int i=0; i<num; i++)
        ret += dataArray[i].toString() + "\n";
    return ret;
}
}
```

#### 5. THE DRIVER CLASS ENTERDATA

```
import java.util.Scanner;
public class EnterData{
    public static void main (String[] args){
        Scanner scan = new Scanner (System.in);
        DataFile file = new DataFile();
        while (scan.hasNext()){
            String first = scan.next();
            String last = scan.next();
            int zip = scan.nextInt();
            PersonalData pers = new PersonalData(first,last,zip);
            file.addPerson(pers);
        }
        System.out.println(file);
    }
}
```