

Practice Maps

Problem statement: The DirtyZipcodes.txt file has some data about zipcodes in the state of California (sample in Figure 1). The data provides a list of zipcodes, city, and county. However, there are two kinds of problems with this data. It has some duplicates (i.e. all three values are same), and dirty zip codes (i.e. same zipcode with different city, county or both).

To be specific

- Zipcode 90029 appears twice with same city and county.
- Zipcode 90630 appears thrice with same city and county.
- Zipcode 90301 appears twice, first time with city as San Diego, and second time with city as Los Angeles
- Zipcode 90401 appears twice, first time with city as San Diego, and second time with city as Los Angeles

Your program should do the following:

1. Find the duplicates and list them all
2. Find the dirty-zipcodes and list them all
3. Add the zipcodes into a Map object after removing the duplicates and over-writing the dirty-zipcodes. Note that any 'dirty zipcode' will have its previous values overwritten by the values read later. For example, in Figure 2, the zipcode 90401 had two values for the city – San Diego and Los Angeles. The program overwrote whatever came first with what came later in the text file.
4. Ask the user for a zip code on which to search and display the result as shown

```
91750,La Verne,Los Angeles
91752,Mira Loma,Riverside
91754,Monterey Park,Los Angeles
91755,Monterey Park,Los Angeles
91756,Monterey Park,Los Angeles
91758,Ontario,San Bernardino
91759,Mt Baldy,Los Angeles
91761,Ontario,San Bernardino
91762,Ontario,San Bernardino
91763,Monterey Park,San Bernardino
91764,Ontario,San Bernardino
91765,Diamond Bar,Los Angeles
```

Figure 1: Zipcodes.txt

```
Duplicate found: 90029, Los Angeles, Los Angeles
Overwritten: 90301, Inglewood, San Diego by 90301, Inglewood, Los Angeles
Overwritten: 90401, Santa Monica, San Diego by 90401, Santa Monica, Los Angeles
Duplicate found: 90630, Cypress, Orange
Duplicate found: 90630, Cypress, Orange
2657 records loaded, 3 duplicates ignored, 2 dirty zipcodes overwritten
Enter zipcode to search
90401
Found county: Santa Monica. city: Los Angeles.
```

Figure 2: Output