**Part one:**

Table

Description automatically generated

1. How many records does the file contain? How many fields are there per record?

There are 7 records within this file, and five fields are included.

1. What problem would you encounter if you wanted to produce a listing by city? How would you solve this problem by altering the file structure?

A problem that a developer may encounter in this situation is having the inability to separate data such as city from the “manager address” field since its contents within are not specific to solely just city. The developer would need to tediously parse out the data with a loop to identify and create variables for each class of information. Instead, implementing a new database for address itself may be the most efficient in this case.

1. What data redundancies do you detect? How could those redundancies lead to anomalies?

The redundancies include more than one log (address, phone number, etc) for the same project manager, leading to an anomaly by counting this individual more times than needed and could cause inaccurate read of data.

**Part two:**

Table

Description automatically generatedUsing your school’s student information system, print your class schedule. The schedule probably would contain the student identification number, student name, class code, class name, class credit hours, class instructor name, the class meeting days and times, and the class room number. Use **Figure P1.11** as a template to complete the following actions.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Stu\_ID | Stu\_Name | Class\_Code | Class\_Name | Class\_CredHrs | Instr\_Name | Class\_Days | Class\_Times | Room |
| 1049302 | Josh Valentino | CSC 2300 | Computer Architeture | 4 | James Petkus | M,W,F | 1:15 pm - 2:20pm | Dunham Hall, 007 |
| 1049302 | Josh Valentino | CSC 3630 | Data Structure and Algorithms | 4 | David A. Lash | T,TH | 8:00am - 9:45am | Institute of Collaboration, 208 |
| 1049302 | Josh Valentino | CSC 4350 | Software Engineering | 4 | David A. Lash | M,W,F | 12:00pm - 1:05pm | Institute of Collaboration ,122 |
| 1049302 | Josh Valentino | CSC 4500 | Database Design & Implement | 4 | Casey Walters | T,TH, | 3:15pm - 5:00pm | Institute of Collaboration ,212 |
| 1003935 | Bryan Ramirez | ACC-2010 | Prins of Financial Accounting | 4 | Lynn Spellman White | T,TH | 10:00 AM - 11:45 AM | Dunham Hall, 002 |
| 1003935 | Bryan Ramirez | BUS-4990 | Contemp Tpcs/Bus Strat & Plan | 4 | Peter Franz | W | 06:00 PM - 09:30 PM | Institute for Collaboration, 316 |
| 1003935 | Bryan Ramirez | CSC-4350 | Software Engineering | 4 | David A. Lash | M,W,F | 12:00PM - 01:05 PM | Institute for Collaboration, 122 |
| 1003935 | Bryan Ramirez | CSC-4500 | Database Design & Implement | 4 | Casey Walters | T,TH | 03:15 PM - 05:00 PM | Institute for Collaboration, 212 |
| 1012613 | Germell Hosch | CSC-4350 | Software Engineering | 4 | David A. Lash | M,W,F | 12:00 PM - 1:05 PM | Institute of Collaboration, 122 |
| 1012613 | Germell Hosch | CSC-4500 | Database Design & Implement | 4 | Casey Walters | T,TH | 3:15 PM - 5:00 PM | Institute of Collaboration, 212 |
| 1012613 | Germell Hosch | MTH-3270 | Discrete Mathmematics | 4 | Sebastian P. Wyman | T,TH | 10:00 AM - 11:45 AM | Institute of Collaboration, 306 |

C.

The redundancies in part two are the same the part one’s table. The data fields do not need the