**Part one:**

Table

Description automatically generated

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

-7 records, 5 fields

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

-The commas could cause issues when pulling the data. One solution could be two add additional fields to the address to avoid using commas. i.e. Street, City, Zip Code.

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

-Multiple records of the same person. The individuals with multiple records each have unique project codes?

**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 |
| 0984011 | Alex Gonzalez | 3640 | Programming Languages | 4 | Steven Henry | MWF | 9:20-10:25 | 103 |
| 0984011 | Alex Gonzalez | 4500 | Database | 4 | Casey Walters | T Th | 3:15-5:00 | 212 |
| 0984011 | Alex Gonzalez | 3811 | Intro to UI/UX | 4 | Pamela A Wicks | Th | 6:30-10:00 | 101 |
| 102124 | Irving Alvarez | 4500 | Database | 4 | Casey Walters | T Th | 3:15-5:00 | 212 |
| 102124 | Irving Alvarez | 3270 | Discrete Math | 4 |  | MWF | 10:00-11:45 | 306 |
| 102124 | Irving Alvarez | 3640 | Programming Languages | 4 | Steven Henry | MWF | 9:20-10:25 | 103 |

c) The class code, class times, and room number, have similar number of digits so parsing through those could cause some similarities and or mix ups.