

Please review the coding exercise below. We are interested in getting your solution, however you come up with it. Use any resources at your disposal. The important thing is that you can explain in person what you did, defend the choices you made, and what challenges you encountered. Your solution will be evaluated to determine whether we will invite you on-site for a technical interview.

You are given a text data file showing **province, city, school, grade (K-8)** and **population with some characteristic (does not matter what)**. The text file is tab separated, apart from the grade and population (see below). Create a program that reads in the file and generates a report summarizing total population per school, city and province. Code must be written in C# or Java and run from Visual Studio or Eclipse. Please provide all data files needed. Code must show some common design approaches. You must handle the file as it is read in. Do not read in the whole file first. Logs to the console should be used to show progress of the file processing, and possibly diagnostics. Questions will be asked during the interview about the work done and choices made.

Code must have at least 2 unit tests – a test that shows a successful parse and one that shows a failure case – i.e. input of bad data.

Sample Input

ON	Waterloo	School1	K1000
ON	Waterloo	School1	12000
ON	Waterloo	School2	83000
ON	Kitchener	School3	K0043
ON	Kitchener	School3	10057
ON	Kitchener	School3	20003
ON	Kitchener	School3	30005
ON	Kitchener	School3	40000

Reports as follows:

School3	108
Kitchener	108
School1	3000
School2	3000
Waterloo	6000
ON	6108