

CS3540 Assignment No. 2

Due Wed, Jan 20, 2015

1. Develop a program that computes the standard deviation of values in an array. The standard deviation measures the spread, or dispersion, of the values in the array with respect to the average value. Implement with C. The standard deviation of array X with N elements is defined as:

$$std = \sqrt{\frac{sqdif}{N-1}}$$

where

$$sqdif = \sum_{j=0}^{N-1} (X_j - Avg)^2$$

2. Develop a program that inputs and processes the rainfall data for the last five years. For every year, four quarters of rainfall are provided measured in inches. Hint: use a matrix to store these values. The attributes are: the precipitation (in inches), the year, and the quarter. The program must compute the average, minimum, and maximum rainfall per year and per quarter (for the last five years). Implement with C.