CS2401: Assignment #5

Due date: October 4th, 2009

Consider the use of two vectors, one to store the list of distinct characters in the string utepNews below and another vector that stores the frequency of each character added to the first vector. The first vector must consider every character in the string including uppercase and lowercase characters, spaces, special characters such as ‘,’ and ‘-‘, and digits.

String utepNews = “Enrollment has reached an all-time high of 21,011 at The University of Texas at El Paso, an almost 3 percent increase over the fall 2008 figure. The record, the greatest year-to-year jump since 2006, reflects awareness on the part of students that they are receiving a quality education at the emerging research university, one of seven in the state striving to attain Tier One status. The figure also represents the eighth straight year in which enrollment has climbed at the University. As UTEP moves toward Tier One status, Natalicio has focused on creating a 21st century educational model that balances access, affordability and excellence in an institution that offers almost 80 bachelor’s degrees, 85 master’s degrees and 16 doctorates – with more on the way.”

Using the two vectors mentioned above, write a program that computes and prints the following:

- Number of distinct characters in the string utepNews below.
- Frequency that each distinct character appears in the string, e.g., number of ‘E’s, of ‘n’s, of ‘r’s of, ‘l’s, of ‘2’s, of ‘1’s, of spaces; the printing of the frequencies should occur in the order that each character first appears in the string.