EELE 475
Assigment #3
Due Thursday Sept. 22, 2011

Problem #1

Create the following function in C that can accept a variable-length argument list.

The function must compute the vector norm $\|v\|$ of a vector where

$$\|v\| = \sqrt{vv^T} = \sqrt{v_1^2 + \cdots + v_n^2}$$

which is the Euclidean length or ℓ^2 norm.

The length of the vector must be specified as the first integer argument and the vector will then be given as float values as the rest of the arguments. The return value must be a float.

Give the following three examples (show screen shots of the results)

vnorm(3, 1.0, 2.0,3.0)

vnorm(4, 2.0, 3.0, 4.0, 5.0)

vnorm(5, 1.0, 1.0, 1.0, 1.0, 1.0)

and implement another example of your choice (which is different from the above examples).

Submit both the vnorm() function code as well as the main() code that runs the examples to the D2L dropbox.