CS 105 Assignment 10

Part I:

I used the strtok function in order to separate each input of data to determine whether the string was numerical or not. In doing this, I was able to add up each numeric string of data in the vector. EX1: data=4,5,6,0 => 15, EX2: data=4,dfk,8,fff.0 => 12 EX3: a b c 5 => 0

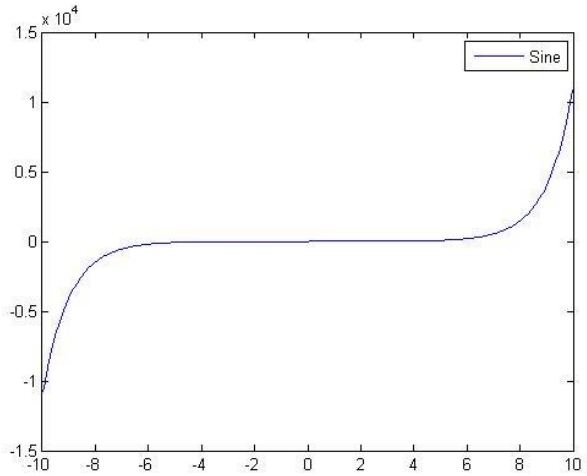
Part II:

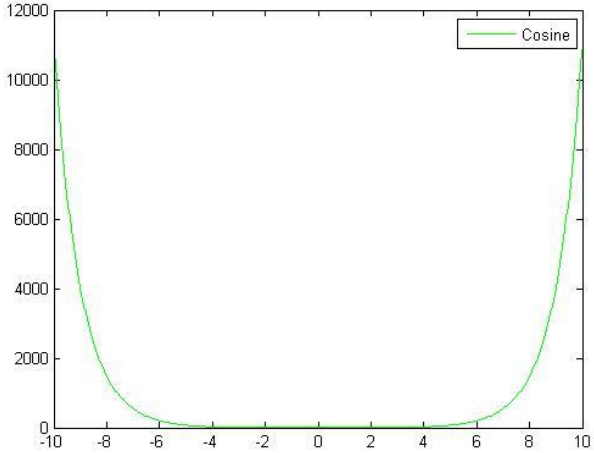
#1: A script is a file that contains lines of commands and code to serve a purpose. A function is code that takes some inputs, does something, and returns some outputs.

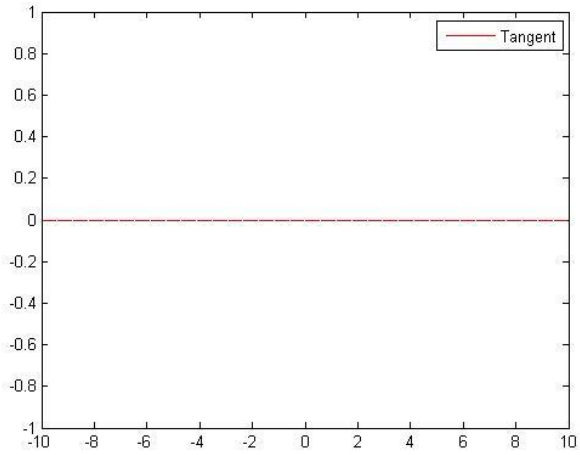
#4: For this problem, I created a function that allowed for a third variable, one that helped determine whether to sort in ascending or descending order. After that, I used the code given in the book for the sorting, making a minor change in the inequality to account for descending order.

#9: For number 9, I used a series of if and elseif statements saying that if x was between any two of six sections between zero and one, then A equals the corresponding number. For example, if x was between 0 and 1/6, A=1, between 1/6 and 2/6, A=2, and so on.

#11: For the sinh, cosh, and tanh functions, I used the exp(x) function to create my own hyperbolic sin, cos, and tan functions. For the plotting script, I chose to plot each graph on its own figure.







What I Learned:

I learned that sometimes it is difficult to think the ways you need to in order to complete each task. It's definitely more difficult to create a function than it is to write a script, because you need to make sure there is a value that is able to be used when needed after the function finishes its job.