Proposed Algorithm

(Subject to change – “drastically”)

1. \*Show plot with trendlines of Moore’s Law and how its slowing down.
   1. \*Allow for user to interact with plot with multiple manipulations
2. Prompt user to choose either Local Based or Server Based
   1. If user chooses Local Based
      1. Ask user if they have their own build or want minimum
         1. If user chooses own build
            1. Ask how much total cost before tax
         2. If user chooses minimum
            1. Continue
      2. Output the system requirements based on .xlsx file
      3. Ask user if they want CMD line output or GUI based
         1. If GUI based
            1. Output the system requirements based on .xlsx
            2. Plot an interactive plot that allows user to see price comparison against user selected Server Based Minimum or Recommended.
            3. Ask user if they want to do this again.
         2. If Command line
            1. Output the system requirements based on .xlsx
            2. Output how many months it will take before it becomes more cost effective to use Local Based
            3. Ask user if they want to do this again with Y/N menu
   2. If user choose Server Based
      1. Ask user what their budget is and store it to variable ‘userBudget’
      2. Ask user if they want minimum or recommended Internet Speed
      3. Ask user if they want CMD line output or GUI based
         1. If GUI based
            1. Budge case switch

If user budget is above the Server based computer parts price, tell user that budget is okay and how much they could save.

If user budge is below the server-based computer parts price, send a warning that budget is not enough and how much more they need. Allow for program to continue.

* + - * 1. Output the system requirements based on .xlsx
        2. Plot an interactive plot that allows user to see price comparison against Local Based Build.
        3. Ask user if they want to do this again with menu
      1. If Command line
         1. Output the system requirements based on .xlsx
         2. Output how many months it will take before it becomes less cost effective to use Server Based
         3. Ask user if they want to do this again, with Y/N

1. On both selections, we will output the disclaimers about data source and how prices may fluctuate from time of data sets was recorded.
2. The whole thing will run on a For-While Loop until user chooses “No” to either parts, which will end the code.

\*denotes may be implemented

\*Corrections and changes from 1B will be that we are no longer going to implement a GUI interface with sliders, buttons, etc. due to the complexity and the amount of time it takes to complete. We will be sticking strictly to CMD based prompt unless our group can figure it out.