Single Channel Data Recorder

Description: This program can only be used if the goal is to recorded for a set amount of time by the user from one channel of the DAQ board. It can also be used to monitor the voltages coming from the DAQ board, but I will not save them. There is a limit to the number of points the Text files can contain, it is in the ball park of 4 million points. To calculate the number of points you ask the file to contain, just multiple the sample rate and the amount of time. The preview setting can run for as long as you wait because it does not save old data that it displays. Another important reminder is that the data being recorded will display only every 20th point. This is to increase the efficiency so the program will not crash, do not change that setting unless there is an important reason to do so.

General Algorithm:

User enters the physical channel & sample rate ->

User then hits the start button ->

4 options for user:

1. Press Preview Button

Raw data will be displayed at the interval for the amount of time the user inputs

1. Press Record Button

Dialog asks for a file path ->

Creates a file header from user inputs ->

sets autoscale X to be on ->

finds how many points it needs to put to text ->

finds how many iterations that is (1 iter. = 0.1 sec) ->

records amount of data for 0.1 for X iter. ->

saves data to file ->