

Teaser Sound and SD Card Tests

The test code initially outputs a number of notes using the [PlayNote](#) function to test that function. Each note lasts approximately 2 seconds. The frequency of the notes output are in order): 261 Hz, 440 Hz, 1000 Hz, 0 Hz (no sound), 2000 Hz, 50 Hz, 4000 Hz, and 100 Hz.

After outputting the above notes a number of tests are made of the [ReadSDCard](#) and [WriteSDCard](#) functions. With each test a higher pitched note is output. In the test the data is written to and read from the SD card. The read data is compared against the data that was written. If all tests pass, the leftmost LED is turned on and a short tune is played. If any test fails, the rightmost LED is turned on and two short notes are played. In the case of failure R20 can be checked to see which test failed. R20 counts down so it will be 16 if the first test fails, 15 if the second test fails, etc. The function arguments (in decimal) for each test are given below. Note that no invalid values are tested (you will need to do that on your own).

function	word count	block number
WriteSDCard	50	1
WriteSDCard	21	3
WriteSDCard	200	357
ReadSDCard	21	3
WriteSDCard	1	4000
ReadSDCard	50	1
ReadSDCard	200	357
WriteSDCard	75	29000
ReadSDCard	21	3
WriteSDCard	0 (256)	11000
ReadSDCard	1	4000
WriteSDCard	100	20000
ReadSDCard	75	29000
ReadSDCard	0 (256)	11000
ReadSDCard	100	20000
ReadSDCard	50	1

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