PA2 85076-70019-b

- 1. This does not compile due to not having the .h files with it and Im not 100% sure what all is new functions. I tried to add mine but for whatever reason it is still giving me exit status 1
- 2. L
- 3. L
- 4. L
- 5. There are no parts marked with a peer review note
- 6. For the generate I snagged that file and ran it solo below is what I got for that, but everything seems to run correctly for this function. It looks like the user allocated the the size of the count for the array however it does not look like they do anything extra with the over allocated memory which in my spot returned some random values but Im not sure it will actually matter as long as the array is freed at the end.



- 7. Array_Load does correctly read in the long values and it counts the number of items by finding the size of the file and dividing by the size of a long int giving it a total number of items.
- 8. Array Save does correctly save the long values to the files.
- 9. It doest look like the shellsort starts with the largest k and moves to the smallest k which is working as intended. It looks like it creates a gap which allows it to adjust every iteration on the number of items it has to have. I looks like the code utilizes insertion sort for the sub arrays, and it does also keep track of each comparison.
- 10. So after some playing around with adding h files and making sure that all of the functions are added properly to the h functions, I was able to test out the entire program. Everything looks to run
 - a. 10.2 covering questions 2 in 10, everything looks to be read correctly from the command line which is awesome.
 - b. 10.3 The program with the -a option seems to run correctly so I think that there should not be any issues. Nothing produced a fail. I was unable to run valgrind but I believe that is more of a me issue, I need to spend some more time on how to reuse valgrind
 - c. 10.4 user did not add anything for the -l will try to help through this process in step 11 and 12
- 11. & 12. So everything you have going here looks great and seems to run rather quickly, I thin that you should be able to implement the list function rather easily. I would recommend just using everything you have now and basically us creating a node create function, and then when you use the insertion sort just make sure to also add a temp for the address switch and you have it. I'm sure that adding the list at the time was probably not on your list of things to do since it is

extra but I would recommend it because I think you can add it by doing some simple changes that really shouldn't take you more than an hr tops including debugging. Might take you about another hour with valgrind to check memory leaks