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CS3411 Program Two: C Programming Warm Up

Line 45 – Extra s in variable type size_t.

Fix: Remove an s.

Line 48 & 54 – Variable 'done' is not initialized and is used in line 54.

Fix: Line 54 uses the variable as if it was a Boolean which C normally doesn't support. Instead, if I initialize the variable as 0 and change the while loop to "while(done == 0)" we can say 0 is "false" and set it to 1 for "true".

Line 56 & 57 – Memory is allocated for the variable 'word'. In line 57, there is a return before this memory is released.

Fix: Before returning, free the memory by using "free(word)".

Line 57 – The return is empty while the function calls for a char pointer.

Fix: Return entries.

Line 58 – getline

Fix:

Line 60 – Strrchr must be stored to a character pointer and cannot be the left side of an equal. Also, strrchr takes a const char * and an int representing a char whereas in the program they use a char in the second position.

Fix: Set strrchr equal to a character pointer variable and cast '/n' to an int. Then in a separate line do a comparison rather than in the same line.

Line 65 – Variable output is never allocated memory before this to store the output of MD5 to.

Fix: Back when the variable is first initialized, allocate memory for the specified 16-byte value.

Line 66 – Entries has already been allocated memory and does not need this line.

Fix: Remove it.

Line 67 – Entries is possibly null because it was never initialized.

Fix: Initialize entries before the while loop.

Line 70 – The function expects an unsigned int argument but instead receives an unsigned char.

Fix:

Line 73 – The output file is not initialized so the function sprintf can't output to a file that does not exist.

Fix: Specify the output file by naming it when you initialize the pointer.

Line 79 – Several storages were not freed before returning.

Fix: Free them before returning.

Line 36 – Variable nbytes is never used.

Fix: Remove it.

Line 88 – The function main is taking 3 args but it only needs the first two.

Fix: Delete the third argument and just reference it from the argument array later.

Line 92 – The lineSum function returns a char** and does not match the variable it is being set to return to.

Fix: Change the variable from a char * to a char **.

Line 96 – The print is given two arguments but only has a spot for one of them.

Fix: Add %d before the %s to make sure the variable I has a place to go.

Line 98 – Printf is not needed without using any variables.

Fix: Just remove the f and make it print.

Line 101 – Program finished without exiting.

Fix: Add exit(0); before the last curly bracket.