

Chad Miller
CS 5959
5/3/2014

Explanation of code not covered

In my code coverage results using *gcov* there were 71 lines that were never reached. The first block was in *pop_arg* where I neglected a *short* type and a *double* type which I didn't use in the *%i* and *%f* specifiers. The second block was in *fmt_fp* where I missed negative sign bits for floating points, *NAN* and infinity floating points as well as the “-” flag. I also missed a block for $e2 > 0$ which I think is related to the exponent being out of range for a float and a block described by `while (*d > 999999999)` which rounds a float if its out of range. On line 379 I missed an else block for the *g* specifier which is related to a range of the exponent. On line 385 I missed trailing zeroes while on line 389 I missed the *alt form* for floats that are not *f* specifiers.

The next function where I missed some blocks is in *printf_core*. Line 471 is ran is there is a overflow. Other lines, such as, 485 I missed because I forgot the dollar \$ which describes the argument index. Another block I missed in *printf_core* was in a switch case statement which show I missed *long long **, *unsigned short **, *unsigned char **, *size_t ** and *uintmax_t **. The last block seems to only be ran if `!f && l10n` which I'm not sure what it means. Finally, the final function is *musl_vfprintf*. I missed a block in lines 670-671 since I missed the final block in *printf_core* (which would have returned -1). Next I missed a block on line 681 which is only ran if *buf_size* is zero. And, finally, I missed a block on line 688 which is only ran if it stores to a file which wasn't possible for this assignment.