

Create a subdirectory of your home directory titled `aug29`. Inside, place your solutions to the problems listed below, naming the files `p01.c`, `p02.c`, etc. Your solutions are due on Wednesday, August 29 before class starts.

1. (1 point) Write a C program that prints the size, as well as the minimum and maximum values of the following data types:
 - `int`
 - `unsigned int`
 - `unsigned char`
 - `double`
 - `unsigned short int`

Direct your output to `stdout`. Hint: Read `man sizeof` and investigate the `limits.h` header.

2. (2 points) Write a C program that reads an integer from `stdin` and prints to `stdout` if it is even or odd. Hint: investigate the modulus operator (`%`).
3. (2 points) Write a C program that reads a character from `stdin` and prints to `stdout` if it is lower case, upper case, a digit, or a special character. Hint: read `man ascii`.
4. (3 points) Write a C program that reads three integers as command line arguments and prints to `stdout` the average, minimum, and maximum of the integers.
5. (3 points) Write a C program that reads an integer representing a number of days as a command line argument. Convert the integer to weeks and years. Print the days, weeks, and years to `stdout`.
6. (3 points) Write a C program that reads three integers `a`, `b`, and `c` as command line arguments and prints to `stdout` whether both, one, or neither of `a` and `b` are exactly divisible by `c`.
7. (3 points) Write a C program that reads both the cost and selling price of an item as command line arguments. Print to `stdout` either profit or loss.
8. (3 points) Write a C program that accepts three command line arguments representing the angles of each corner of a triangle. Print to `stdout` if it is equilateral, isosceles or scalene triangle. Hint: floating point numbers should be used.