

PDP-8/e Programming

This assignment will introduce you to a different architecture - the PDP-8/e hardware and the associated assembly language PAL. You should complete this assignment individually.

If you have not gone through the Intro to PDP8 & PAL materials on Moodle you will need to do that first!!!

Deliverables: your commented mystery program.

Your Task

Assemble and run the provided mystery.pal program to determine its overall function. Add a summary description of the program function in comments at the top, then add **detailed comments** throughout the program describing how it accomplishes that function. Submit the commented version with the appropriate name. Comments should be things like "add the value to the total in the ACC" or "loop Y times" as opposed to "TAD the value at mem address 200" or "jump to line 20", i.e. explain what the program is doing, don't just write a definition of each instruction. The goal is for you to understand this program in detail so that you can write your own!

Notes:

- appendix D will be especially useful, so I included it as a separate PDF to make it easier to navigate/print
- the "input" for this program is the initial value of the shift register (SR in the simulator), so you need to hand-edit that register's value before running the program in the simulator in order to test it on different values.
- include in your comments mention of any edge cases that the program handles.
- make sure the program still assembles and runs correctly after you add your comments (remember the strict rule about 80-character lines)

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