



# Unix System Programming

nm/objdump



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# Administrative Details

- Your sources shall be turned-in on the PSU\_year\_nmobjdump directory.
- Your project shall be compiled with a unique Makefile.
- Your Makefile shall contain:
  - a rule nm to compile your nm project
  - a rule objdump to compile your objdump project
  - a rule all to call the two rules above
- The projects binaries are:
  - my\_nm for the nm project
  - my\_objdump for the objdump project
- The projects binaries must be placed in your project's root directory
- You shall do this project alone.



## Subject

- The goal is to code an equivalent to the "nm" and the "objdump" system commands, without the options.
- Your my\_objdump shall have the same behavior than objdump -f -s
- You shall handle a variable number of parameters
- The display produced MUST be the one of your "bocal" dump
- The programs shall work with:
  - relocatable files : .o and .a
  - shared files : .so
  - executable files
- The other options "may" give you bonus.



Some options, deemed too easy or useless, may be ignored by the correctors

- The nm and objdump mans explain in detail how these commands work.



*Indices*

It is strongly recommended to try these functions to understand perfectly how they work



*Indices*

This project needs you to do research on the ELF format. Feel free to spend time on it.



# Forbidden functions

- exec\*
- system
- all the functions allowing you to execute the system nm (or objdump)



# Allowed functions

- The C library without the forbidden functions