

- ① ELF: (executable and linkable format) is a common file format used for executables, object code, shared, shared libraries and core dumps in Linux and Unix-like operating systems. To analyse an ELF file we can use various tools such as:-
- ② objdump: the tool is a part of GNU Binutils package and provides a wide range of information about object files and executables in various formats including ELF. Objdump can display disassembled code, sections, symbols, relocation information & more.
- ③ readelf: the tool is specifically designed to display the contents of ELF files. It provides a detailed overview of the ELF file header, program section header, symbols & other attributes.
- ④ gdb: the GNU Debugger or gdb can be used to debug and analyse ELF files. It can display disassembled code, set code breakpoints, examine memory and execute commands while the program is running.
- ⑤ Nm: this tool lists symbols from object files & executables including those in ELF format. It can display symbol names, values & types.
- ⑥ ldd: this tool lists shared libraries depended on an ELF file. It can help identify missing or incomplete libraries required to run the program.

Date _____
Page _____

⑦ strace: this tool traces system calls & signals made by program allocating memory & allowing to see how it interacts with operating system. It can be useful for troubleshooting issues with ELF files that system specific system calls.