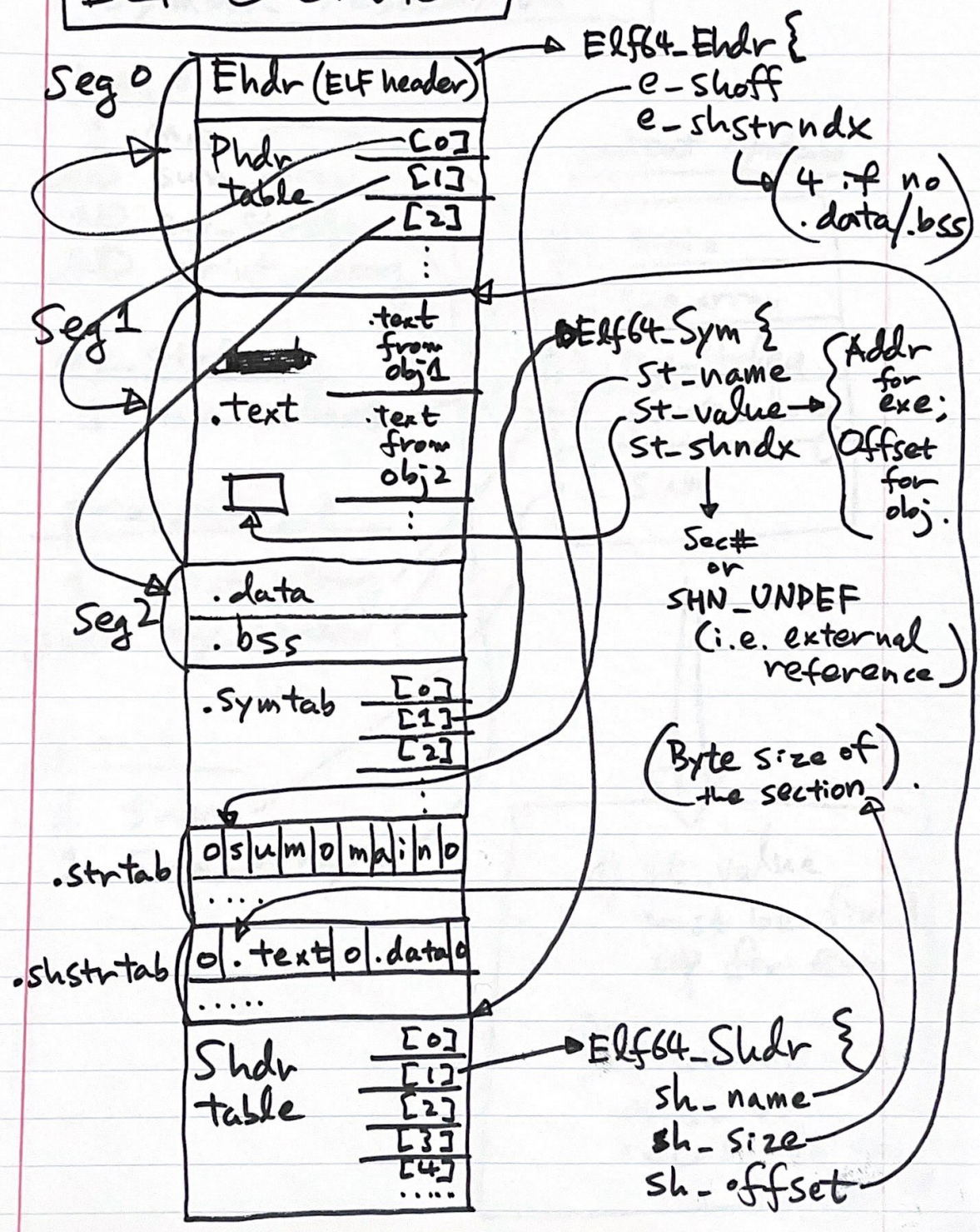


ELF Overview



Relocation

echo.o (in echo1).

$$1) \text{ref_addr} = 401000 + 19d$$

$$2) \text{val} = \text{symbol_addr} \\ - \text{ref_addr} \\ + \text{addend}$$

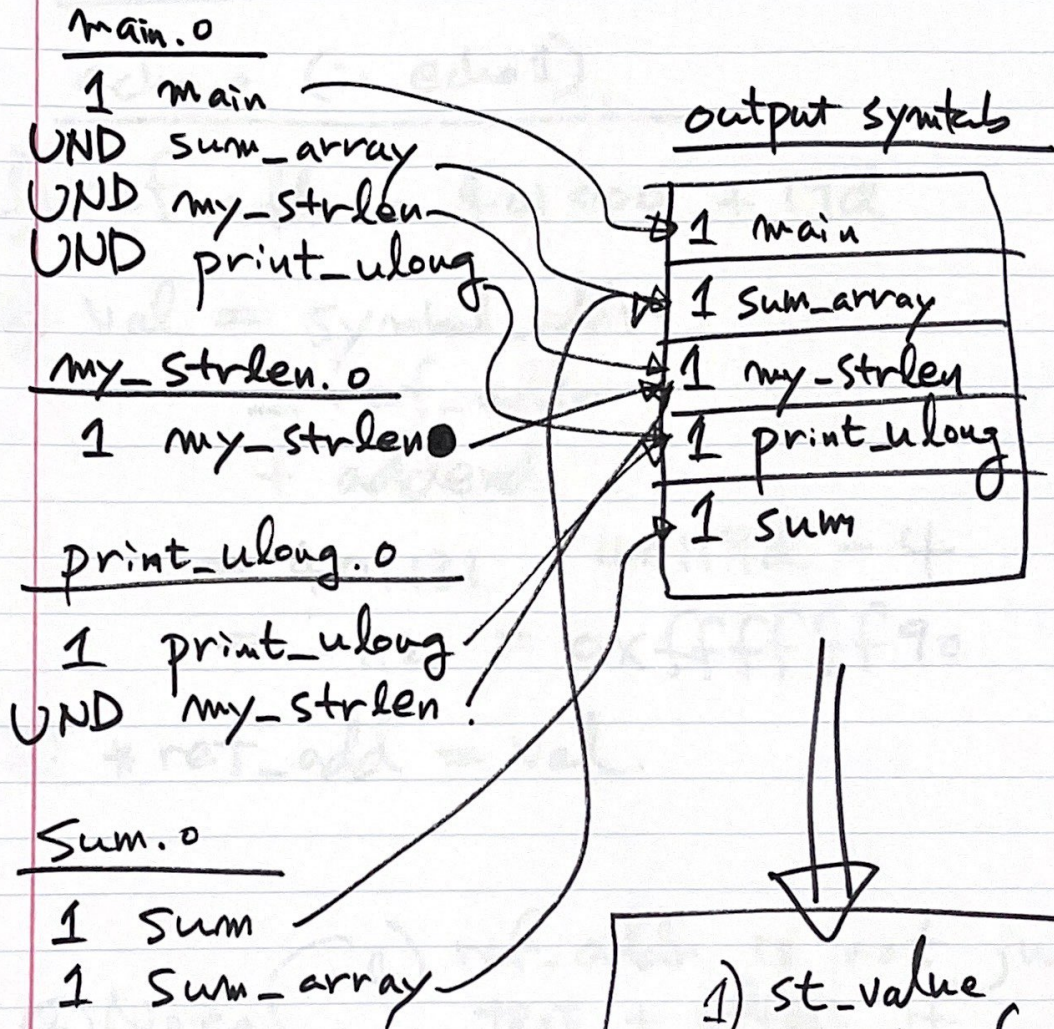
$$= 401131 - 40119d - 4$$

$$= -112 = 0xffffff90$$

$$3) * \text{ref_addr} = \text{val}.$$

- * Note for multiple objs.
- 1) ref_addr is not just .text + offset if there are multiple objs.
 - 2) ~~symbol_addr~~
Symbols from multiple objs must be resolved before symbol_addr can be looked up.

Symbol resolution



- 1) st_value must be fixed up for exe.
- 2) st_name must be recalculated