

1. Given a pointer to struct D called “d”, what expression will access “data”, the member of struct A?

Ans: `d->c.b->a.data`

2. Given the following structs, predict the memory layout of a struct A named “stack”. You may assume that it is a 32-bit machine.

Ans:

Address	Expressions
A+0x0	stack, stack.a
A+0x4	stack.b
A+0x8	stack.c
A+0xC	stack.ptr
A+0x10	stack.mem, stack.mem.d
A+0x14	stack.mem.e

3. Given the functions below, what is the value stored in the points a and b after calling foo?

Ans: Before: a: 1, 0 b: 0, 1 After: a: 0, -1 b: 0, 1