

Homework 5 (Chapter 6)

b.3

a should be kept in register, because a is the function parameters

b should be kept in memory, because b is passed by pointer and accessed in procedure g()

c should be kept in memory, because c is an array and also accessed in procedure g()

d should be kept in register, because d is a temporary variable and not used after the function g called

e should be kept in register, because e is the return result of function f.

b.7

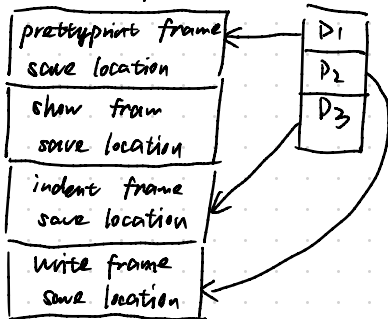
(a) 1. get the frame pointer to show

2. fetch show's static link

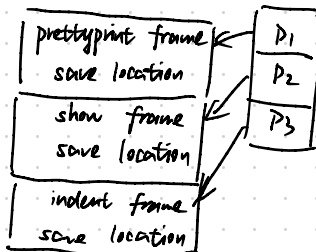
3. get the frame pointer to prettyprint

4. fetch output

(b) the display and stack view as following:



calling write in indent



after calling write in indent
before use output

when using output:

① get D2, finding that there's no local variable output

② then get D1, fetching the variable output