

Ch14

2

(a) It assures that when control returns to callers, they can once again access its local variables.

(b) It makes sure that when the function returns, PC can have the value of next instruction and get to work normally.

(c) It' s the result of the function that will be used by the caller.

4

(a) Caller

(b) Callee

(c) Caller

(d) Callee

15

FRAME PTR
X3103
0
16
4
5
6

6
5
4

Ch17

2

No. Because the return address is active to make sure that every attempt to the call can be certain to complete the recursive function.

5

a)

(1) 0

(2) 2

(3) 0

b) $\text{Power}(a,b) = \lfloor \log_b(a) \rfloor$

c) frame pointer

return address <---The address of Power function being executed.

1

7

0

7

a) The largest input value is 2048. $(16 \cdot 1024 / (4 \cdot 2) = 2048)$

b) The largest input value is 512. $(4 \cdot 1024 / (4 \cdot 2) = 512)$