Shaun Chemplavil U08713628

shaun.chemplavil@gmail.com

C/C++ Programming II : Dynamic Memory and File I/O Concepts

149123 Raymond L. Mitchell, Jr., M.S.

07/20/2020

C2A2E3_StackFrames.pdf

This file contains the stack frame for the given “Greatest Common Divisor” recursive function shown in the prompt

Relative Address	Absolute Address	Stack Value	Description
		startup	
BP+7h	B8Fh	1005h	Function Return Address
BP	B88h	0h	Previous Frame Address
		Function main	
BP+Ch	B83h	??	Return Object (int)
BP+7h	B7Ch	??	Function Return Address (pointer)
BP	B75h	B88h	Previous Frame Address (pointer)
BP-5h	B70h	??	result (int)
		Function ready	
BP+Fh	B68h	??	Return Object (long – implied conversion from short)
BP+7h	B61h	62Dh	Function Return Address (pointer) (assignment to result)
BP	B5Ah	B75h	Previous Frame Address (pointer)
BP-4h	B56h	??	temp (short)
		Function gcd 1	
BP+1Ah	B51h	??	Return Object (int – implied conversion from long)
BP+16h	B4Dh	360	y argument (short)
BP+Eh	B45h	480	x argument (long)
BP+7h	B3Eh	3F0h	Function Return Address (pointer) (assignment to **temp**)
BP	B37h	B5Ah	Previous Frame Address (pointer)
		Function gcd 2	
BP+1Ah	B32h	??	Return Object (int – implied conversion from long)
BP+16h	B2Eh	360	y argument (short – implied conversion from long)
BP+Eh	B26h	120	x argument (long)
BP+7h	B1Fh	45Dh	Function Return Address (pointer) (return on line 42)
BP	B18h	B37h	Previous Frame Address (pointer)
		Function gcd 3	
BP+1Ah	B13h	??	Return Object (int – implied conversion from long)
BP+16h	B0Fh	0	y argument (short - implied conversion from long)
BP+Eh	B07h	120	x argument (long)
BP+7h	B00h	45Dh	Function Return Address (pointer) (return on line 42)
BP	AF9h	B18h	Previous Frame Address (pointer)