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Lab 09 – Runtime Stack

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1.

Location B:

Activation record h()	Load b[1] = 8
	Load b[0] = 4
	Local variable k = 4
	Local variable b[0] = 0
	Local variable b[1] = 0
	Dynamic link
	Return address
	Return value = 14
	Parameter n = 2
Activation record main()	Local variable b[0] = 2
	Local variable b[1] = 3
	Local variable b[2] = 4
	NULL dynamic link
	Return address to OS
	Return value

Location C:

Activation record main()	Load b[2] = 14
	Local variable b[0] = 2
	Local variable b[1] = 3
	Local variable b[2] = 4
	NULL dynamic link
	Return address to OS
	Return value = 14

2.

Location A:

g(1, 6)	Dynamic link
	Return address
	Return value = 6
	Parameter n = 1
g(2, 3)	Parameter r = 6
	Dynamic link
	Return address
	Return value
g(3, 1)	Parameter n = 2
	Parameter r = 3
	Dynamic link
	Return address
main()	Return value
	Return address to OS
	NULL dynamic link
	Local variable x = 0

Location B:

g(2, 3)	Dynamic link
	Return address
	Return value
	Parameter n = 2
g(3, 1)	Parameter r = 3
	Dynamic link
	Return address
	Return value
main()	Parameter n = 3
	Parameter r = 1
	Local variable x = 0
	NULL dynamic link

Location C:

g(3, 1)	Dynamic link
	Return address
	Return value = 6
	Parameter n = 3
main()	Parameter r = 1
	Local variable x = 0
	NULL dynamic link
	Return address to OS

Location E:

main()	Load x = 6
	Local variable x = 0
	NULL dynamic link
	Return address to OS