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CS 281

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Project Report

Attached:

project.c – C code for project

project.asm – assembly for project

## <u>fun1</u> and <u>fun2</u> explanation:

Fun1 and fun2 are simple they both function exactly the same way. First the function loads address v0 with the location of str0, which is in memory. Then it loads the word located in this address to a0. Then it calls the print\_int function which will handle returning the word to the console. Finally, it will then return 1 and then turn sp to its initial location before fun1 call.

## **Stack Tracing:**

before fun1 called		After fun1 called		
counting	counting bytes	counting	counting bytes	
words		words		
-10	Original sp -32	New sp	new sp +0	
-9		+54		
-8		+55	new sp +28	Х
-7		+56	\$2	str0
-6		+57		
-5		+58		
-4		+59		
-3		+60	new sp +28	
-2		+61	new sp +32	1
-1		+62		
	-			

before fun2 called		After fun2 called		
counting	counting bytes	counting	counting bytes	
words		words		
-10	Original sp -32	New sp	new sp +0	
-9		+64		
-8		+65	new sp +28	х
-7		+66	\$2	str1
-6		+67		
-5		+68		
-4		+69		
-3		+70	new sp +28	
-2		+71	new sp +32	2
-1		+72		
		+73		
		+74		
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## **QtSpim Screenshot:**

