Christopher McGrath
CSCI 230: Project 1
10.20.19

Task 1:

```
62      SWI 0
(gdb) i r
r0             0x200a8             131240
r1             0x200b4             131252
r2             0x200c0             131264
r3             0x4030201           67305985
r4             0x8070605           134678021
r5             0xc0b0a09           202050057
r6             0x4030201           67305985
r7             0x8070605           134678021
r8             0xc0b0a09           202050057
r9             0x8060402           134611970
r10            0x100e0c0a          269356042
r11            0x18161412          404100114
r12            0x0                 0
sp             0x7efff620          0x7efff620
lr             0x0                 0
pc             0x10098             0x10098 <_start+36>
cpsr           0x10                16
fpscr          0x0                 0
(gdb)
```

Answer to question in task 1:

The program requires 3 separates add functions to add the two vectors together. In the case of my code, I used add to store the sum of r3 and r6 into r9, the sum of r4 and r7 into r10, and the sum of r5 and r8 into r11.

Task 2:

```
Breakpoint 1, _start () at project1.s:62
62      SWI 0
(gdb) i r
r0             0x200a8             131240
r1             0x200b4             131252
r2             0x200c0             131264
r3             0x4030201           67305985
r4             0x8070605           134678021
r5             0xc0b0a09           202050057
r6             0x4030201           67305985
r7             0x8070605           134678021
r8             0xc0b0a09           202050057
r9             0x8060402           134611970
r10            0x100e0c0a          269356042
r11            0x18161412          404100114
r12            0x0                 0
sp             0x7efff620          0x7efff620
lr             0x0                 0
pc             0x10098             0x10098 <_start+36>
cpsr           0x10                16
fpscr          0x0                 0
(gdb)
```

Answer to question in Task 2:

I couldn't get mine to work properly, so I just used UADD8 as if it were just an add statement. I'm assuming that it can be used to add the vectors together in just one line of code, but I wasn't able to find the syntax to accomplish that. In my function I used three lines of code to add the vectors together, but it's probably possible to do it in one line of code. If I had to choose which method I would prefer, I'd choose the UADD8, because I'm sure it's more efficient than the simple add instruction, I just couldn't get it to work.