CS101 Homework 6

Due: Wednesday, November 30, 1PM (sharp).

Collaboration: You are allowed and encouraged to work together and collaborate with others. However, your submission must be your own; you must write up your homework without referring to material developed with other groups.

You may use the WWW for reference material. You may use the material you found to develop your understanding, but your submission must be your own.

Summary: you may use any and all resources at your disposal, but your submission must be your own work.

1. Based on the "Safe Kernel Extensions Without Run-Time Checking" paper, write down the verification condition for the following program, assuming that the postcondition is `true`.

```
1    STQ   r₃, 0(r₀)
2    LDQ   r₂, 0(r₁)
3    LDQ   r₃, 8(r₁)
4    ADDQ  r₂, r₂, r₃
5    LDQ   r₃, 16(r₁)
6    ADDQ  r₂, r₂, r₃
7    LDQ   r₃, 0(r₀)
8    BEQ   r₃, L₁
9    STQ   r₃ 0(r₂)
L₁   RET
```

2. Try simplifying the VC you have gotten.