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1. Given the following code:

Load R2, Off(R0)

→ 2 stall cycles

Add R1, R2, R3

→ 0 stall cycles

Sub R1, R2, R5

→ 2 stall cycles

Sw R1, Off(R6)

→ 0 stall cycles

Beq R1, R2, L

→ worse case  
3 wasted

No hazard detection unit

How many stall cycles are there when running this code on figure 1? Indica

2. Given the following code:

Lw R2, Off(R0)

Beq R1, R2, L

worse case  
3 wasted

No hazard detection unit, can't stall.

How many stall cycles are there when running this code on figure 1? Indicate the position of the stall

2. Given the following code:

Lw R2, Off(R0)

1 stall cycle

Sw R7, Off(R2)

0 stall cycles

Add R1, R2, R3

0 stall cycles

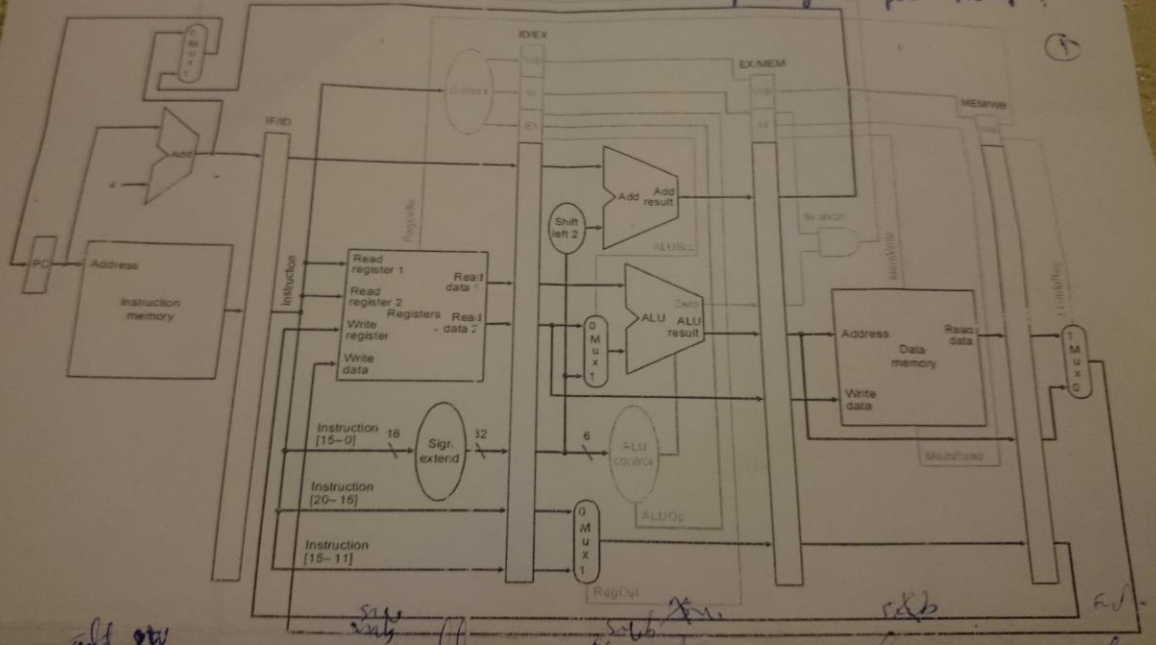
Sub R1, R2, R5

~~1~~ stall cycle. → 2 stalls.

Sw R1, Off(R6)

How many stall cycles are there when running this code on figure 2? Indicate the position

No hazard detection? Flawed datapath? Computer's job to plan NoOps?



IDEX MemRead

