Assignment 6   Naser Alrhateri

2a)

%rax	%rbx	%rdx	%rcx	%xmm0	%xmm1

Load   Load

adda   mul

cmpa   adds

jl

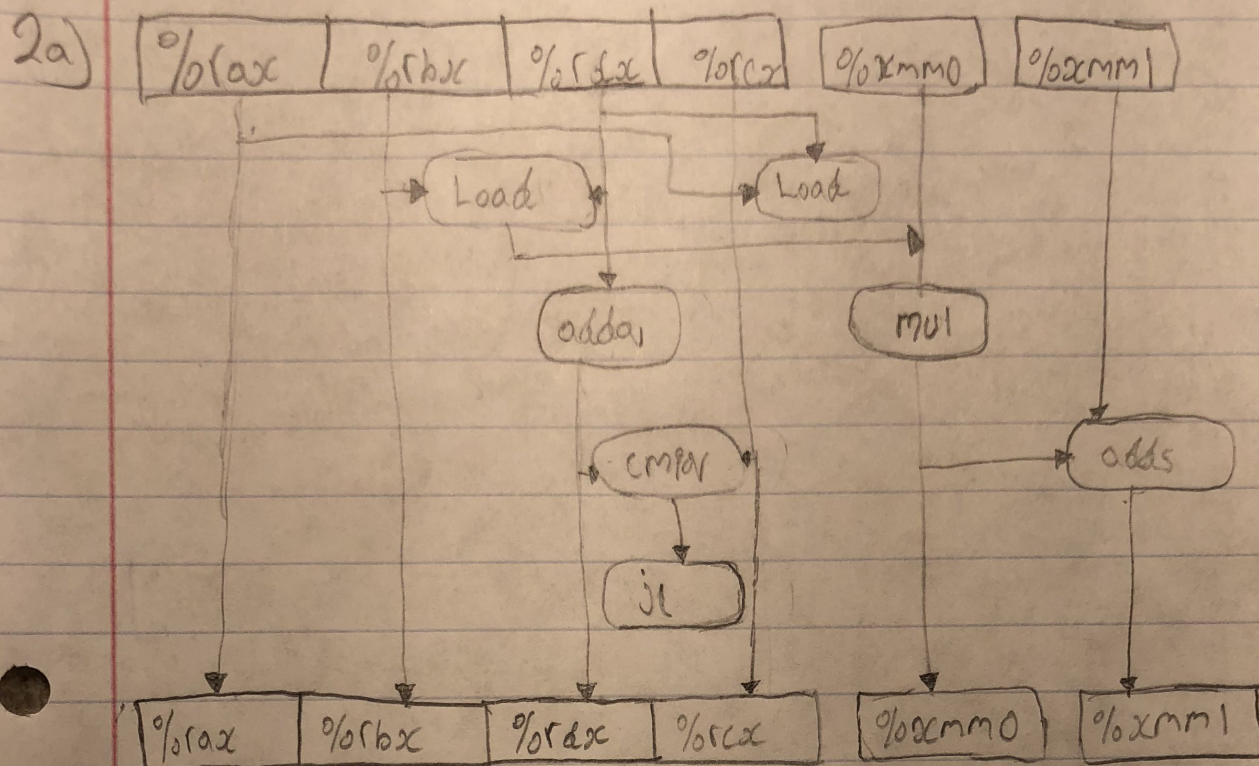| %rax	%rbx	%rdx	%rcx	%xmm0	%xmm1

b) "adds" and "adda" cannot be piplined because "cmpa" needs the return from the function calls.
The latencies for "adda" is one cycle, "adds" is three cycles, and "mul" five cycles.

d) Whith playing around with the numbers, Inner2 was always faster, in some cases it would be the same. When given small numbers, both could have the same time or inner2 would be faster. When given huge numbers, inner started to be slower.