Quiz 4

1. It has multiple integers or floating point units
2. Decomposed instruction excetuion into multiple steps
3. The person at the head of the line never pauses to get more water
4. Strict: RW seen by all CPUs in same order

Sequential: RW from each CPU maintain order

1. Typically for interpreters; convert VM code to native instructions at runtime
2. Modern cache/memoery design imposes an excetuion-time penalty for unaligned access
3. Move code that is independent of iteration out of loops
4. Structural control data
5. All stages prior to that point must delay until it is cleared
6. For(I = 0; I < N; i+=2){ a[i]=b[i+1]\*c; a[i+2] = b[i+3]\*c;}
7. for (i=0; i<N; i++) {a[i]=b[i+1]; a[i+1] = b[i+2]… c[i]=a[i]\*d[i] c[i+1] = a[i+1]\*d[i+1]…;}
8. when a parallel task can be partitioned into different closures
9. pauses all threads in a team until all have reached same point
10. each team member sums local value. Finally they are all summed globally
11. 1,2,3,4,; 1,4,9,16; 0,2,6,12; 1,2,6,12
12. kernel has no stack or heap
13. global, const, local, private
14. get\_global\_id(index)