

1	for (i=0; i<N; i++) $c[i] = c[i+1] + b[i];$ <b>Always vectorizable</b>
2	for (i=0; i<N; i++) $c[i] = c[i-1] + b[i];$ <b>NOT vectorizable (loop-carried dependency distance 1)</b>
3	for (i=0; i<N; i++) if (b[i]!=0) $c[i] = a[i] / b[i];$ <b>Vectorizable</b> <b>Requires support for conditional vector execution</b>
4	while (b[i]!=0)            { $c[i] = a[i] / b[i]; i++$ } <b>Partially vectorizable (vector search for zero, set vl, vector divide)</b> <b>Fully vectorizable with speculative vector support</b>
5	for (i=0; i<N; i++) $t += a[i] * b[i];$ <b>Partially vectorizable by using tree reduction (vector temporary)</b> <b>Fully vectorizable if reduction permutation supported</b>
6	for (i=0; i<N; i++) $c[i] = a[d[i]] + b[i];$ <b>Vectorizable</b> <b>Requires support for indexed instructions</b>
7	for (i=0; i<N; i++) $c[d[i]] = a[i] + b[i];$ <b>Vectorizable if</b> - $d[i]$ elements are disjoint OR - HW executes vector stores in order
8	for (i=0; i<N; i++) $c[d[i]] += a[i] + b[i];$ <b>Vectorizable ONLY if <math>d[i]</math> elements are disjoint</b>
9	for (i=0; i<N; i++) $c[2*i] = a[2i+1];$ <b>Vectorizable with strided accesses</b>

Comments: