```
1 void inner7(vec_ptr u, vec_ptr v, data_t *dest)
2 {
3 long int i;
4 int length = vec_length(u);
5 int limit = length-3;
6 data_t *udata = get_vec_start(u);

7 data_t *vdata = get_vec_start(v);
8 data_t sum = (data_t) 0;
9
10 /* Do four elements at a time */
11 for (i = 0; i < limit; i+=4) {
12 sum +=
13 ((udata[i] * vdata[i]
14 + udata[i+1] * vdata[i+1])
15 + (udata[i+2] * vdata[i+2]
16 + udata[i+3] * vdata[i+3]));
17 }
18
19 /* Finish off any remaining elements */
20 for (; i < length; i++) {
21 sum += udata[i] * vdata[i];
22 }
23 *dest = sum;
24 }
```