

```
1.  __global__ void SpMV_ELL(int num_rows, float *data, int *col_index,
    int num_elem, float *x, float *y) {
2.      int row = blockIdx.x * blockDim.x + threadIdx.x;
3.      if (row < num_rows) {
4.          float dot = 0;
5.          for (int i = 0; i < num_elem; i++) {
6.              dot += data[row+i*num_rows] * x[col_index[row+i*num_rows]];
7.          }
8.          y[row] = dot;
9.      }
10. }
```