```
1  void saxpy_openmp(
2     int n,      // the number of elements in the vectors
3     float a,    // scale factor
4     float x[],  // the first input vector
5     float y[]   // the output vector and second input vector
6  ) {
7  #pragma omp parallel for
8     for (int i = 0; i < n; ++i)
9        y[i] = a * x[i] + y[i];
10 }
```

LISTING 4.5

SAXPY in OpenMP.