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Nearest One

- Describe how you solved this problem.
- I first find the prefix sum for each of the bits in the array.
- Then I compacted the the prefix sums of the bits of the array. Next I create a thread for each of the items in that prefix sum and set the compacted values equal to the output.
- Copy the sections of parallel code that are new for this problem (i.e., do not include any code from previous problems) below – this should represent your implementation of the description provided above.

```
int j;
omp_set_num_threads(8);    //opens 8 threads
# pragma omp parallel private (j)
{
    j = omp_get_thread_num();
    output[j] = compacted_prefix[prefix_sum[j]-1];
}
```

- Describe another way to solve this problem (do not include any code).