```
int a[n], sum[n];
process Sum[i = 0 to n-1] {
  sum[i] = a[i];   /* initialize elements of sum */
  while (d < n) {
    if ((i-d) >= 0)    /* update sum */
      sum[i] = sum[i-d] + sum[i];
    d = d + d;     /* double the distance */
  }
}
```

Computing partial sums on a SIMD machine.