

```

sum  $\leftarrow$  0;   cs  $\leftarrow$  0;   ccs  $\leftarrow$  0;
for i  $\in$  0..n - 1 do
    t  $\leftarrow$  sum + x[i];
    if |sum|  $\geq$  |x[i] then c  $\leftarrow$  (sum - t) + x[i];
    else c  $\leftarrow$  (x[i] - t) + sum;
    sum  $\leftarrow$  t;
    t  $\leftarrow$  cs + c;
    if |cs|  $\geq$  |c| then cc  $\leftarrow$  (cs - t) + c;
    else c  $\leftarrow$  (c - t) + cs;
    cs  $\leftarrow$  t;   ccs  $\leftarrow$  ccs + cc;
    return sum + cs + ccs

```

## KahanSum

attributes