RunAutoCorr Documentation

The RunAutoCorr program will produce the autocorrelation of the input trace. Since the auto-correlation
is symmetric around 0, we only produce the left hand side of the auto-coorealation.
<h2>Synopsis</h2>
RunAutoCorr inputDataFileName

Given the input data file, we make the auto-correlation of the file according to the formuala:

$$\phi_{x,y}(\tau) = \sum_{k} x(k)\,y(k+\tau)\,.$$

As you can see,
$\phi_{x,y}(-\tau) = \phi_{x,y}(\tau)\,.$
Thus, we need only provide $\phi_{x,y}(\tau)$ for $\tau > 0\,.$

We **Return** the autocorrelation array on standard out for $\tau > 0\,.$