Def: An <u>algorithm</u> is a procedure for doing something.

Def: A <u>pseudocode</u> is a list of steps, input & output for applying an algorithm to a problem.

Ex: Suppose your goal is to sum N values $\{x_j\}_{j=1}^{N}$

What is the algorithm? $S = \sum_{j=1}^{N} x_j$

What is the pseudocode?

Input: $N, \{x_j\}_{j=1}^{N}$

Output: S = the sum

Step1: $S = 0$, $j = 1$

Step 2: While $j \leq N$

$$S = S + x_j$$
$$j = j + 1$$

$$j = j + 1$$

step 3: return S