

Pseudocode Examples

Example 1: Write pseudocode (in plain English) to read three positive numbers and printout their average.

1. Read the numbers from the user: say X, Y, Z
2. Find the total of the numbers : $\text{Total} = X + Y + Z$
3. Divide the total by 3 and save it in Result: $\text{Result} = \text{Total} / 3$
4. Print out Result

Example 2: Write pseudocode (in syntax-like) to read three positive numbers and printout their average.

```
METHOD FIND_AVERAGRE  // using loop
BEGIN
    Set average = 0
    FOR (I = 1 to 3)
        READ input_value  // read from the user
        set sum = sum + input_value
    ENDFOR
    // compute and print the average
    Set average = sum / 3.0
    Printout average
END FIND_AVERAGRE
```

Example 3: Write pseudocode (in plain English) to read three numbers and find the maximum value.

1. Read the numbers: say X, Y, Z
2. Set Max to the first value: $\text{Max} = X$
3. Compare Max to Y and pick the maximum value: If $\text{Max} > Y$, then $\text{Max} = Y$
4. Compare Max to Z and pick the maximum value: If $\text{Max} > Z$, then $\text{Max} = Z$
5. Print out Max

Example 4: Write pseudocode (in plain English) to read an array of grades and print out their total.

1. Read the array of grades: Grades
2. Define and set Total to 0: $\text{Total} = 0$
3. Loop: for every value in the array, say $\text{Grades}[i]$ and set $\text{Total} = \text{Total} + \text{Grades}[i]$
For $i = 1$ to array_size
 $\text{Total} = \text{Total} + \text{Grades}[i];$
4. Print out Total

Example 5: Write pseudocode (in syntax-like) to read ten numbers and find the maximum value.

```
METHOD FIND_MAX
BEGIN
    READ input_value      // from user
    Set max = input_value  // assume first value is the max
    FOR (I = 1 to 9)
        READ input_value  // from user
        IF (max < input_value)
            set max = input_value
        ENDIF
    ENDFOR
    Printout max
END FIND_MAX
```

Example 6: Write pseudocode (in syntax-like) to read and store grades into an array (assume array size is 30), then print out their total followed by their average.

```
METHOD GRADES
BEGIN
    // read the grades into the array
    Define Array grades[30]
    FOR (I = 1 to 30)
        READ grade_value // read from user
        Set A[I] = grade_value
    ENDFOR

    // add up all grades
    Set total = 0
    FOR (I = 1 to 30)
        set total = total + A[I]
    ENDFOR

    // determine their average
    Set average = total / 30.0
    Printout total
    Printout average
END GRADES
```