

STRING_TO_NUM(s : STRING) RETURNS INTEGER
returns a numeric representation of a STRING eg STRING_TO_NUM("5") will return 5

RIGHT(s : STRING, x:INTEGER) RETURNS STRING
returns rightmost x chracters from s eg RIGHT("muppet", 3) will return "pet"

A Payroll System processes salary data.
Salary data is stored in an array. Each element
in the array stores Employee and Payment data in
a STRING eg:

"SN1001-546"

The first 7 characters are always the ID and
everything after that is a payment amount.

Here are some more examples of valid data:

"SN2303-70","SN5464-9000","SN4356-5"

The procedure DisplayTotal takes an array
of salary data strings as a parameter and
calculates and displays the total salary. For the
above 3 samples, the total is 70+9000+5 = 9075
Write this algorithm in program code.

<pre> PROCEDURE DisplayTotal(data:ARRAY[1:n] OF STRING) DECLARE Total, i, slice, amount : INTEGER Total ← 0 FOR i ← 1 TO n slice = LENGTH(data[i]) - 7 #how many numbers at end of string amount ← RIGHT(data[i], slice) #slice those numbers! amount ← STRING_TO_NUM(amount) #convert the slice to INTEGER total ← total + amount #update the total END FOR OUTPUT "The total is ", total END PROCEDURE </pre>	
<pre> //computer program DECLARE s: ARRAY[1:5] OF STRING s ← ["SN3432-10", "SN5412-203", "SN1000-25", "SN8729-5", "SN3432-5"] //call the procedure, passing the array as an argument CALL DisplayTotal(s) </pre>	

Corrective maintenance
Test your code and fix any bugs that appear.

Adaptive maintenance
Another procedure displays a count of how many staff were paid more than \$100.
Write the pseudocode for this adaptation.