ACSL American Computer Science League

2013 - 2014

Contest #2

PRINT FORMATTNG

Senior Division

PROBLEM: In the ACSL programming language formatting output is accomplished using the ACSL FORMAT command.

The syntax of the command is: FORMAT string, value

The string part of the command consists of a series of &'s that may or may not have imbedded characters. The table below defines the various combinations that will be used for this program.

String	Value	Result	
&&&&	25	The 4 &'s define a field of 4 characters. The value will be right justified in the	
		field. *'s fill on the left. Output **25	
&,&&&&&	12345	A comma anywhere in the string inserts a comma after every third character with	
		character following. Start on the right. Output *12,345	
&&&.&&&&	12.34	The decimal point defines how many decimal places will print. If there are fewer	
		digits than characters then 0's are printed. Output *12.3400.	
&&&.&&	12.345	If there are fewer characters than digits then the value is rounded to that number of	
		characters. Output *12.35	
\$&&&&.&&	123.45	The \$ places a \$ immediately to the left of the value. No *'s are printed. No	
		space is allowed. Output \$123.45	
*\$&&&&&&.&&	123.45	The *\$ fills the leading blank spaces with *'s and inserts the \$ as above. Output	
		***\$123.45	
&&&E	25376	The E at the end of the &'s means to write the value in exponential form rounding	
		when there are more digits than characters and filling in with 0's otherwise.	
		Output 2.54E4	

INPUT: There will be 5 lines of input. Each line will contain a character string and a rational number value.

OUTPUT: For each input line, print the result of implementing the formatting string on the given value.

SAMPLE INPUT 1. &&&&&. 456	SAMPLE OUTPUT 1 ***456
2. &&&&&,&, 1000000	2. 1,000,000
 \$&&&&.&&, 123.38 &&&.&&&, 23.49 	3. \$123.38 4. *23.490
 5. &&&.&&&, 23.4999 6. &&&E, 45 	5. *23.500 6. 4.50E1