ACSL American Computer Science League

Contest #3

2005 - 2006

Senior Division STRINGS

PROBLEM: Given a character string and a list of functions that operate on strings, calculate the resulting string. The functions are as follows:

LS-X: Shifts all the characters of the string X places to the left. The leftmost X characters are deleted and X #'s are inserted on the right to return the string to its original length. LS-3 COMPUTER = PUTER###

RS–X: Shifts all the characters of the string X places to the right. The rightmost X characters are deleted and X #'s are inserted on the left to return the string to its original length. RS–3 COMPUTER = ##COMPU.

LC-X: Circulates the leftmost X characters to the right-hand side of the string. LC-3 COMPUTER = PUTERCOM

RC-X: Circulates the rightmost X characters to the left-hand side of the string. RC-3 COMPUTER = TERCOMPU

MC– SLXD: Circulates the sub-string starting in position S with a length of L, X characters, in the direction D. All the arguments (S, L, X and D will be one character in length. The direction will be either L or R for left and right. MC–332R COMPUTER = COPUMTER

REV–SL: Reverses the order of the characters starting at position S with a length of L. REV–33 COMPUTER = COUPMTER

SWAP–SLP: Swaps the characters starting in position S with a length of L with characters starting in position P with the same length. SWAP–225 COMPUTER = CUTPOMER.

SORT–SLM: Sorts the characters starting in position S with a length of L in the sort mode indicated. The mode M will either be A or D representing ascending and descending. SORT–24D COMPUTER = CUPOMTER. SORT will not be used on strings with special characters or numbers.

INPUT: There will be five lines of input. Each line will be a string. Each string will consist of one or more commands and a character string to operate on. The commands will be separated from each other by a slash. The order of operation is always from left to right as the commands appear.

OUTPUT: For each line of input, print the resulting string.

SAMPLE INPUT

- 1. LS-1/RS-1/OHIO
- 2. RC-2/LC-5/CINCINNATI
- 3. LS-1/LC-3/MC-453L/MEMORIAL
- 4. SWAP-438/SENDIVISION
- 5. SORT-55A/COMPUTERS

SAMPLE OUTPUT

- 1. #HIO
- 2. CINNATICIN
- 3. RIAMOL#E
- 4. SENSIOIDIVN
- 5. COMPERSTU