

C++ Programming

While Loops Homework 3

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Teaching, Training and Coaching since more than a decade!

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Problem #1: Find NOs

- Read integer N, then read N strings.
 - Print only the strings (of 2 letters).
 - These 2 letters must be letter 'N' and letter 'O'
 - Regardless of lower or upper case
 - Regardless of the 2 letters order
 - E.g. print "No", "ON", "no" but ignore e.g. "YEs", "Noooo"
 - That is: a word of 2 letters only N and O
- Input
 - 9 Yss NO noOO oN Mostafa no nN oOOooo oO
- Output
 - NO oN no

Problem #2: Reverse number

- Read an integer N, then find its reverse integer R
 - Print R R*3
- input \Rightarrow Output
 - 123 \Rightarrow 321 963

Problem #3: Multiplication table

- Read an integer N and M, then print NxM lines for their multiplication table.
- Input 3 4
- Output
 - $1 \times 1 = 1$
 - $1 \times 2 = 2$
 - $1 \times 3 = 3$
 - $1 \times 4 = 4$
 - $2 \times 1 = 2$
 - $2 \times 2 = 4$
 - $2 \times 3 = 6$
 - $2 \times 4 = 8$
 - $3 \times 1 = 3$
 - $3 \times 2 = 6$
 - $3 \times 3 = 9$
 - $3 \times 4 = 12$

Problem #4: Special Sum

- Read integer T for number of test cases.
- For each test case read integer N. Then read N integers a, b, c
- Output: Compute the **sum** of the following expression:
 - a, b*b, c*c*c, d*d*d*d, e*e*e*e*e.....
 - That is the k-th number is repeated k times
- Input:
 - 2
 - 3 5 7 2
 - 4 1 2 3 4
- Output
 - 62 [as $(5 + 7*7 + 2*2*2) = 62$]
 - 288 [as $(1+2*2+3*3*3+4*4*4*4) = 288$]

“Acquire knowledge and impart it to the people.”

“Seek knowledge from the Cradle to the Grave.”