Print Pretty

Your manager gave you a text file with many lines of numbers to format and print. For each row of 3 space-separated doubles, format and print the numbers using the specifications in the *Output Format* section below.

Input Format

The first line contains an integer, T, the number of test cases.

Each of the T subsequent lines describes a test case as 3 space-separated floating-point numbers: A, B, and C, respectively.

Constraints

- $1 \le T \le 1000$
- Each number will fit into a double.

Output Format

For each test case, print 3 lines containing the formatted A, B, and C, respectively. Each A, B, and C must be formatted as follows:

- 1. A: Strip its decimal (i.e., truncate it) and print its hexadecimal representation (including the $\mathbf{0x}$ prefix) in lower case letters.
- 2. \emph{B} : Print it to a scale of $\emph{2}$ decimal places, preceded by a + or $\overline{}$ sign (indicating if it's positive or negative), right justified, and left-padded with underscores so that the printed result is exactly $\emph{15}$ characters wide.
- 3. C: Print it to a scale of exactly nine decimal places, expressed in scientific notation using upper case.

Sample Input

1 100.345 2006.008 2331.41592653498

Sample Output

0x64 ____+2006.01 2.331415927E+03

Explanation

For the first line of output, $(100)_{10} \rightarrow (64)_{16}$ (in reverse, $6 \times 16^1 + 4 \times 16^0 = (100)_{10}$). The second and third lines of output are formatted as described in the *Output Format* section.