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The Virtual Learning Environment for Computer Programming

Dice Pairs (1) X11911\_en

We have been throwing a pair of dice repeatedly, recording the outcome. Each die thrown shows a number between 1 and 6. Each time, we throw both dice and record their sum. We need the so-called "histogram": for each outcome, how many times along the experiment we have obtained that outcome.

Write a program that reads the sequence of outcomes and prints out the histogram; your program should print only the nonzero entries. Follow precisely the format in the example; there should be no additional blank spaces or lines.

Additional suggestions: (a) in Python, propose first a version using a list as internal data structure; then, move on to a version using a dict; (b) once your program works, and fully outside the jutge, find out how to depict the histograms visually using *matplotlib*. You may try asking your instructor for an example of the desired figure.

## Sample input

7 4 10 5 4 7 11 5 6 5 8

## Sample output

4:

5: 3

7: 2

0 - 1

10: 1

11: 1

## **Problem information**

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