

Missing Permutation • Mark Senn • last updated on 2022-03-05 at 15:05-05

Problem Statement

From The Weekly Challenge - 154 Task #1: Missing Permutation retrieved on 2022-03-01 at 21:31-05:

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You are given possible permutations of the string 'PERL'.

PELR, PREL, PERL, PRLE, PLER, PLRE, EPRL, EPLR, ERPL, ERLP, ELPR,
ELRP, RPEL, RPLE, REPL, RELP, RLPE, RLEP, LPER, LPRE, LEPR, LRPE,
LREP

Write a script to find any permutations missing from the list.

Raku Solution

```
my @given =  
'  
    PELR, PREL, PERL, PRLE, PLER, PLRE, EPRL, EPLR, ERPL,  
    ERLP, ELPR, ELRP, RPEL, RPLE, REPL, RELP, RLPE, RLEP,  
    LPER, LPRE, LEPR, LRPE, LREP  
'  
.comb(/<upper>+/);  
  
my @computed = <P E R L>.permutations.map({.join});  
  
(@computed (-) @given).keys.sort.join(' ').say;
```

A detailed explanation of the first line of code follows:

Code	Description
my	Define a variable.
@given	The @ is a <i>sigil</i> indicating that the following name is an array. The name of the array is given .
=	Assign @given to the result of the right hand side of the command.
'...'	The given character string.
.comb(/<upper>+/)	<p>You may be familiar with the concept of <i>split</i>. The result of 'a,b,c'.split(/,/) is an array containing a, b, and c. Split matches delimiters, throws them away, and saves the stuff between the delimiters.</p> <p>Comb matches the wanted strings and throws everything else away. Use <upper> to match an uppercase letter, follow the <upper> by + and that matches one or more uppercase letters. The result of 'A / BB * * CCC'.comb(/<upper>+/) is an array containing A, BB, and CCC.</p>
;	The end of the command.