

## ARITHMETIC PUZZLE

POETRY OF PROGRAMMING – CLOJURE ASSIGNMENTS

Check: permutations

We multiply numbers  $x$ ,  $y$  and  $z$ . We want to make the product  $xyz$  maximal, with the given conditions.

- (1)  $x$  is a 3-digit number
- (2)  $y$  is a 2-digit number
- (3)  $z$  is a single digit number

Only the digits 1,2,3,4,5 and 6 can be used, and each digit must be used only once.

Hint: the problem is not too big, so brute-force (checking all possibilities) is doable.