

Problem 1—Same Digits

Professor Plum likes to keep his elementary-aged children minds active over the summer months with simple mathematical puzzles. He asked them to answer the following puzzle.

Find the smallest positive integer x , such that $2x$, $3x$, $4x$, $5x$ and $6x$ all contain exactly the same set of digits.

INPUT SPECIFICATION.

This problem needs no file input, or any other input.

OUTPUT SPECIFICATION.

This problem should produce only a single line of output containing the smallest such positive integer x .