Title

Array permutations

Problem Description

A permutation of a set is a re-arrangement of the order of the elements of the set. All of the elements of the original set must be present in the permutation. For example, if the original order of a set of letters is CAT, then CTA, TAC, and TCA are all valid permutations but CCA and CTT are not valid.

Have the user enter 5 integers and store them in an array. Your program must output to the screen all 120 possible permutations of these integers.

Hint: in order to solve this problem, you will be using nested loops. A **lot** of nested loops ☺.

Testing

Three permutations of the array {1,2,3,4,5} are shown below:

1 2 3 4 5

1 2 3 5 4

1 2 5 4 3

We promise that there are, in fact, 120 such permutations.

Time Target

*** less than 10 minutes

** 10-20 minutes

* greater than 20 minutes

Section

Arrays