Implementation of collections

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In this question, we want to implement mathematical sets. Write a program that works according to the following input and output.

Entrance

In the first line of the input, you will receive a number n, which represents the number of members of the first set, in the second line, n is an integer that is the members of the first set (the entries are not necessarily different from each other), in the third line, you will receive a number m, which represents the number of members of the set. is second, and on the last line of input you are given m integers that are members of the second set.

output

In the output, first display all the subsets of both sets as in the output (in the order shown in the output), then display the members A∪B, A∩B, A-B and A△B in the order of the sample output. P.N.: The output of the subsets is in numerical order

Sample input

4

1 2 3 4

3

3 5 7

Sample output

A -> {} , {1} , {2} , {3} , {4} , {1,2} , {1,3} , {1,4} , {2,3} , {2,4} , {3,4} , {1,2,3} , {1,2,4} , {1,3,4} , {2,3,4} , {1,2,3,4}

B -> {} , {3} , {5} , {7} , {3,5} , {3,7} , {5,7} , {3,5,7}

A∪B:{1,2,3,4,5,7}

A∩B:{3}

A-B:{1,2,4}

$A \triangle B$:{1,2,4,5,7}