Algorithm Analysis Problem

Finding Number Pairs Which Sum to Target Number

# Problem: Given an array of *n* integers and a target number *t*, find all unique pairs of integers (*ni ,nj*) such that *ni* + *nj* = *t*.

## Example:

Input: array = [5, 3, 9, 8, 11, 1, 4, 12], target = 12

Output: {[3,9], [4,8], [1,11]}

Explanation:

Each pair of numbers in the output, when added together, result in the target number.

[3,9] -> 3 + 9 = 12

[4,8] -> 4 + 8 = 12

[1,11] -> 1 + 11 = 12

Note: Pairs must be distinct. The pairs [3,9] and [9,3] are not distinct, and therefore they represent the same pair of numbers in the example solution.