Challenge 1: A List as a Subset of Another List

Can you find whether a given list is a subset of another list by using a hash table?

We'll cover the following

- Problem Statement
 - Input
 - Output
 - Sample Input
 - Sample Output
- Coding Exercise

Problem Statement

Implement the is_subset(list1,list2) function which will take two lists as input and check whether one list is the subset of the other. This method is already available in Python, but we'll be implementing it using hash tables.

Note: The input arrays do not contain duplicate values.

Use the Python set as your hash table.

Input

Two lists of integers.

Output

True if list2 is a subset of list1.

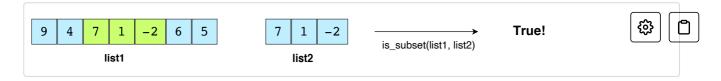
Sample Input

list1 =
$$[9,4,7,1,-2,6,5]$$

list2 = $[7,1,-2]$

Sample Output

True



Coding Exercise

Design a step-by-step algorithm before jumping on to the implementation.

You have already understood how to implement a hash table. However, since we are working in Python, you can use the in-built set or dict class which provides the same functionality as a hash table.

If you get stuck, you can refer to the solution review in the following lesson.

Good luck!

