



# 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 takes two lists as input and checks 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 lists 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



→  
is\_subset(list1, list2)

**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!



```
def is_subset(list1, list2):  
    # Write your code here  
    pass
```



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