Exercise 1: Write a program that turns two sets into one dictionary.

Example 1:
set_1 = {1, 2, 3, 4}
set_2 = {7, 8, 9, 10}

Output:
The dictionary is: {1: 7, 2: 8, 3: 9, 4: 10}

Example 2:
set_1 = {"one", "two", "three", "four"}
set_2 = {1, 2, 3, 4}

Output:
The dictionary is: {'one': 1, 'two': 2, 'three': 3, 'four': 4}

Exercise 2: Write a program that checks if a key is already in a dictionary. If it is not, add it to the dictionary with a value of “empty”.

Example 1:
my_dict = {"dad": "Eise", "sister_1": "Iris", "sister_2": "Nicky"}
key = “dad”

Output:
dad is in the dictionary!

Example 2:
my_dict = {"fruit": "Apple", "vegetable": "Capsicum"}
key = “meat”

Output:
meat is not in the dictionary!
The new dictionary is: {"fruit": "Apple", "vegetable": "Capsicum", “meat”: “empty”}

Exercise 3.1: Create a set that only contains red objects(apple, crab, rose, strawberry, etc.), and a set that only contains fruits(orange, apple, strawberry, grape, kiwi, mandarin, etc.). Write a program that compares the fruits set with the red set, prints a set that only contains the red fruits and prints a set that contains all fruits that aren’t red fruits.

Exercise 3.2: Create a set that only contains orange objects(basketball, fanta, orange, autumn leaves, mandarin). Write a program that prints a set that contains all of the red and orange fruits but none of the other ones. Also print a set that contains all of the objects without the fruits.

Exercise 3.3: Write a program that prints a LIST(!!!!) that contains all of the objects and fruits. Make sure the list doesn’t have any duplicates

Exercise 4: Write a program that checks whether a dictionary is empty.

Example 1:
my_dict = {0: 19, 1: 33, 2: 18, 3: 30, 4: 26}

Output:
This dictionary is not empty

Example 2:
my_dict = {}

Output:
This dictionary is empty

Exercise 5: There is a dictionary of 5 integers. Write a program that gives the same dictionary, but with the values in ascending order.

Example 1:
my_dict = {0: 19, 1: 33, 2: 18, 3: 30, 4: 26}

Output:
The sorted dictionary is: {0: 18, 1: 19, 2: 26, 3: 30, 4: 33}

Example 2:
my_dict = {0: 45, 1: 7, 2: 44, 3: 81, 4: 6}

Output:
The sorted dictionary is: {0: 6, 1: 7, 2: 44, 3: 45, 4: 81}