1. Given two lists of different lengths, write a program to pair the elements to form a list of tuples. Any leftover elements in the longer list should be paired with None.
2. Write a program to find the intersection of sets that contain tuples. (define your own function)
3. Write a program to find the symmetric difference between multiple sets.
4. Write a program to find the Cartesian product of two sets.
5. Write a program to flatten a deeply nested tuple. (for instance, if tuple=(1,2,(3,4,(5,6)))) then the output should be like new_tuple=(1,2,3,4,5,6).
6. Generate a dictionary where the keys are numbers and the values are Boolean indicating if the number is prime.
7. Given a list of integers, write a program to compute the frequency of each integer and store the results in a dictionary.
8. Given a list of sentences, count the occurrences of each word across all sentences. Store the counts in a dictionary and print the dictionary.
9. Given a paragraph (a string), split it into words, count the frequency of each word, and store the counts in a dictionary. Print the dictionary showing each word and its frequency.
10. Given a list of integers, group them by their first digit and store the results in a dictionary where the keys are the first digits and the values are lists of numbers starting with that digit. Print the dictionary.