Exercise 1: Basic Data Types

1.1. Create a program that takes two integers as input from the user and prints their sum.

1.2. Extend the program to take a floating-point number as input and print its square root. (Hint: Use the **math.sqrt** function)

1.3. Ask the user for their age and print a message telling them how many years they have until they turn 100.

1.4. Create a program that converts Celsius to Fahrenheit. The formula is **F = (C * 9/5) + 32**.

1.5. Concatenate two strings and print the result.

Exercise 2: Lists

2.1. Create a list of numbers and print the sum of all the numbers in the list.

2.2. Create a list of words and print the concatenation of all the words.

2.3. Reverse the order of elements in the list and print the reversed list.

2.4. Create two lists and concatenate them. Print the result.

2.5. Create a list of mixed data types (integers, floats, strings) and print each element.

Exercise 3: Tuples

3.1. Create a tuple of mixed data types (integers, floats, strings) and print each element.

3.2. Find and print the maximum and minimum values in the tuple.

3.3. Create another tuple and concatenate it with the first tuple. Print the result.

3.4. Convert the tuple from exercise 3.1 into a list and modify one of the elements. Convert it back to a tuple and print the result.

3.5. Create a tuple of numbers and calculate the sum of its elements.

Exercise 4: Sets

4.1. Create two sets, one with even numbers and the other with odd numbers. Find and print the union of the two sets.

4.2. Check if one set is a subset of the other and print the result.

4.3. Remove an element from one of the sets and print the updated set.

4.4. Create a set of unique characters from a given string. Print the set.

4.5. Create a set of numbers and find and print the intersection with the set from exercise 4.1.

Exercise 5: Dictionaries

5.1. Create a dictionary representing a book with keys for 'title', 'author', and 'year'. Print each key-value pair.

5.2. Add a new key-value pair for 'genre' and print the updated dictionary.

5.3. Check if 'publisher' is a key in the dictionary. If not, add it with a value of your choice.

5.4. Create another dictionary for a different book and combine it with the first dictionary. Print the combined dictionary.

5.5. Print the value associated with the 'author' key in one of the dictionaries.