**Data Types and Variables**

1. **Basic Arithmetic Operations:**
   * Create two variables, a and b, and assign them values of 10 and 20 respectively. Perform and print the results of addition, subtraction, multiplication, and division.
2. **String Manipulation:**
   * Create a variable name and assign your full name to it. Write a program to:
     + Print the length of the name.
     + Print the name in uppercase and lowercase.
     + Extract and print the first and last name separately.

**Conditional Statements**

1. **Even or Odd:**
   * Write a program that takes an integer input from the user and prints whether the number is even or odd.
2. **Grade Classification:**
   * Write a program that takes a score (between 0 and 100) as input and prints the grade based on the following criteria:
     + 90-100: A
     + 80-89: B
     + 70-79: C
     + 60-69: D
     + 0-59: F
3. **Leap Year Checker:**
   * Write a program that checks if a given year is a leap year. (A year is a leap year if it is divisible by 4 but not by 100, except if it is also divisible by 400.)

**Loops**

1. **Sum of Natural Numbers:**
   * Write a program to calculate the sum of the first 10 natural numbers using a for loop.
2. **Factorial Calculation:**
   * Write a program that calculates the factorial of a given number using a while loop.
3. **Fibonacci Sequence:**
   * Write a program to generate the first 10 numbers in the Fibonacci sequence.

**Functions**

1. **Palindrome Checker:**
   * Write a function is\_palindrome that takes a string and returns True if the string is a palindrome, and False otherwise.
2. **Prime Number Checker:**
   * Write a function is\_prime that takes an integer and returns True if the number is prime, and False otherwise.

**Lists and Tuples**

1. **List Operations:**
   * Create a list of integers and perform the following operations:
     + Append a new element to the list.
     + Remove an element from the list.
     + Sort the list in ascending order.
     + Find the maximum and minimum elements in the list.
2. **Tuple Operations:**
   * Create a tuple with the numbers from 1 to 5. Write a program to:
     + Print each element of the tuple.
     + Find the length of the tuple.
     + Check if a certain number (e.g., 3) is present in the tuple.

**Combined Concepts**

1. **Unique Elements:**
   * Write a function that takes a list and returns a new list with only the unique elements from the original list.
2. **Common Elements:**
   * Write a function that takes two lists and returns a list of the elements that are common to both lists.
3. **Grade Average Calculation:**
   * Write a program that takes a list of student grades and calculates the average grade, the highest grade, and the lowest grade.