

Data Structures

1. Write a Python program to remove all duplicates from a list and print the unique elements.
2. Create a tuple of 10 integers. Write a program to display the maximum and minimum numbers from the tuple.
3. Write a Python function that accepts a list and returns a new list with only the even numbers from the original list.
4. Write a program to count the number of each character in a given string using a dictionary.
5. Create a set of prime numbers less than 50. Write a program to check whether a given number exists in the set or not.
6. Given two lists, write a program to find their intersection using sets.
7. Write a Python program to merge two dictionaries and sum the values of common keys.
8. Given a list of names, write a program to count how many times each name appears using a dictionary.
9. Write a Python program to remove elements from a list that are also present in another list.
10. Write a program to input key-value pairs from the user and store them in a dictionary. Allow the user to search for a key and display its value.

Conditions and Loop

1. Write a program to check whether a given number is prime or not.
2. Write a program to print all the even numbers between 1 and 100 using a loop.
3. Write a program that reads a number and prints the factorial of that number using a while loop.
4. Write a program to print the multiplication table of a given number using a for loop.
5. Write a program to find the largest and smallest number in a list entered by the user.
6. Write a program that accepts 10 integers from the user and counts how many are positive, negative, and zero.
7. Write a program to generate the Fibonacci sequence up to n terms.
8. Write a program that reads a number and prints whether it is a palindrome or not.
9. Write a program that finds all numbers between 100 and 999 where the sum of the cubes of the digits equals the number itself (Armstrong numbers).

10. Write a menu-driven program to perform arithmetic operations (+, -, *, /) based on user choice using conditional statements.