Lab Assignment 9
AI and ML Lab

1. Write a Python program that takes a list of numbers (e.g., [34, 1, 88, 76, 23]) from the user input and prints the list in ascending order without using the built-in sort function.

2. Given a dictionary with keys as months and values as average temperatures (e.g., {'January': 31, 'February': 35, 'March': 45}), write a Python script that finds and prints the month with the highest average temperature.

3. Define a Python function called is_prime that takes a single integer argument and returns True if the number is a prime number, otherwise returns False. Then, use this function in a script to print prime numbers from 1 to 100.

4. Use a list comprehension to create a list of the first 10 squares of even numbers starting from 2. Print this list.

5. Write a Python program that reads a text file containing a single word per line. Count the occurrence of each word, store the result in a dictionary, and print the word count for the word that appears most frequently.