## COMPUTER ENGINEERING LABORATORY

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## Lab exercises



## List of cities



Exercise: manage a list of cities with sizes and population

Objective: Create a program in C to manage information about cities. The program should create a linked list where each node stores the name of a city, its size (in square kilometers), and its population.

Consider the sample input file cities\_size\_population.csv which contains in every row the name of a city, its size and its population separated by a semicolon.

Problem Statement: Write a program that read the file whose name is passed as first argument to the program and create a linked list with nodes including the city name, size and population. Then display a menu with the following choices:

## List of cities



- Add a city: Add a new city to the list with its size and population.
- Display all cities: Show the list of all stored cities with their details.
- Find the largest city: Display the city with the largest size and its size.
- Find the most populated city: Display the city with the largest population and its population.
- Delete a city: Remove a city from the list by its name.
- Order list in ascending order of population
- Order list in ascending order of size
- Exit: Exit the program.