

# We Deliver: A system for a delivery company

Write a program for the company “We Deliver” which helps it keep track of its drivers and the cities it is delivering to.

In your system, you should keep track of two things:

1. The drivers that the company has, their worker ID, their name, and their start city.
2. The cities that the company delivers to and where the driver can go from that city.

There are three main menus in the system. When the user runs the program, they are welcomed with the first one which displays:

Hello! Please enter:

1. To go to the drivers' menu
2. To go to the cities' menu
3. To exit the system

Based on the user input, your system will either redirect them to the next menu, or exit.

## DRIVERS' MENU

In that menu, the user is greeted with the following options:

Enter:

1. To view all the drivers
2. To add a driver
3. To go back to main menu

### View all drivers

A list of all the drivers and their detail is printed to the users

i.e.:

ID001, Max Verstappen, Akkar

ID002, Charles Leclerc, Saida

ID002, Lando Norris, Jbeil

### Add a driver

The user is asked to enter the name and start city of the driver, the driver is then saved to the system.

**The user does not input the ID of the driver, it is automatically generated by the system**

The user might input an invalid start city, make sure that the start city is already available in the database. If the city is not available, ask the user if they want to add it to the database, if yes, you should do so.

### Go back

This option takes the user back to the previous main menu.

## CITIES' MENU

In that menu, the user is given the following choices:

1. Show cities
2. Print neighboring cities
3. Print Drivers delivering to city

### Show cities

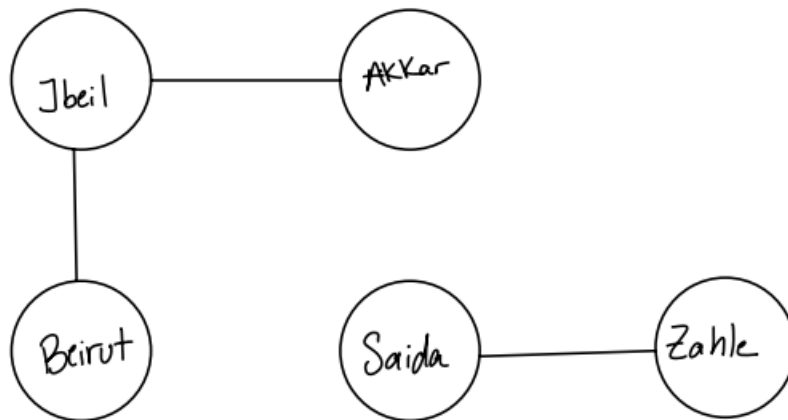
Print a list with the name of all the cities in the program.

### Print neighboring cities

Asks the user for a city name, and then prints all cities that can be reached from the user input.

### Print Drivers delivering to city

Asks the users for a city name, and then prints all drivers that are delivering to this city. Drivers might not have this city as their starting city, but they can reach it by going through different cities.



For example, if the user inputs Beirut, Both Max and Charles will be printed. But if the user inputs Zahle, only Lando will be printed.

Hint:

There are functions called “Breadth First Search (BFS)” and “Depth First Search (DFS)”, you can look them up and use them here. But you don’t have to.

**Good luck and remember to divide and conquer :)**

# Don't use AI

Or use it, I cannot physically stop you. But you will struggle in the code review session if you do :)