

Outputs

Display

```
tahad@MSI ~
$ g++ -o lab9b hydro.cpp list.cpp

tahad@MSI ~
$ ./lab9b
Program: River Flow Data Linked List, Fall 2024
Version: 1.0
Lab Section: L01
Produced by: Taha Zuberi

<<< Press Enter to Continue >>>>

New record inserted successfully.
New record inserted successfully.
New record inserted successfully.
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New record inserted successfully.
New record inserted successfully.
Please select one of the following operations:
1. Display flow list, and the average
2. Add data
3. Save data into the file
4. Remove data
5. Quit
Enter your choice (1, 2, 3, 4, or 5): 1
Year      Flow (in billions of cubic meters)
-----
1900      220.1
1901      210.1
1922      193.0
1945      145.7
1946      301.0
1947      311.0
1970      100.3
1971      210.0
1972      220.0
1989      235.0
1990      215.0
1999      111.0
2000      110.2
2001      231.4
2002      211.4
-----
The annual average of the flow is: 201.7 billions of cubic meters.

<<< Press Enter to Continue >>>>
```

Adding Data then Displaying Again

```
Please select one of the following operations:
1. Display flow list, and the average
2. Add data
3. Save data into the file
4. Remove data
5. Quit
Enter your choice (1, 2, 3, 4, or 5): 2
Please enter a year: 2018
Please enter the flow: 999
New record inserted successfully.

<<< Press Enter to Continue >>>>

Please select one of the following operations:
1. Display flow list, and the average
2. Add data
3. Save data into the file
4. Remove data
5. Quit
Enter your choice (1, 2, 3, 4, or 5): 1
Year      Flow (in billions of cubic meters)
-----
1900      220.1
1901      210.1
1922      193.0
1945      145.7
1946      301.0
1947      311.0
1970      100.3
1971      210.0
1972      220.0
1989      235.0
1990      215.0
1999      111.0
2000      110.2
2001      231.4
2002      211.4
2018      999.0
-----
The annual average of the flow is: 251.5 billions of cubic meters.
```

Removing Data then Displaying Again

```
Please select one of the following operations:
1. Display flow list, and the average
2. Add data
3. Save data into the file
4. Remove data
5. Quit
Enter your choice (1, 2, 3, 4, or 5): 4
Please enter the year that you want to remove: 1900
Record was successfully removed.

<<< Press Enter to Continue >>>>

Please select one of the following operations:
1. Display flow list, and the average
2. Add data
3. Save data into the file
4. Remove data
5. Quit
Enter your choice (1, 2, 3, 4, or 5): 1
Year      Flow (in billions of cubic meters)
-----
1901      210.1
1922      193.0
1945      145.7
1946      301.0
1947      311.0
1970      100.3
1971      210.0
1972      220.0
1989      235.0
1990      215.0
1999      111.0
2000      110.2
2001      231.4
2002      211.4
2018      999.0
-----
The annual average of the flow is: 253.6 billions of cubic meters.
```

Saving Data to File

```
Please select one of the following operations:
1. Display flow list, and the average
2. Add data
3. Save data into the file
4. Remove data
5. Quit
Enter your choice (1, 2, 3, 4, or 5): 3
Data are saved into the file.

<<< Press Enter to Continue >>>>
```