

Lab 1 Report

Output

```
File Edit Selection View Go Run Terminal Help
functions.cpp - LAB1 - Visual Studio Code

EXPLORER
  OPEN EDITORS
    node.h
    declaration.cpp
    functions.cpp
    main.cpp
  LAB1
    .vscode
    a.exe
    declaration.cpp
    declaration.h.gch
    functions.cpp
    main.cpp
    node.h
  OUTLINE
  TIMELINE

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE
powershell + - [] v x

The list is not empty!
5 was added to head

Searching 5
Found!
5
Address retrieved
New node was added

traversing

traversing

adding new node to tail
abc was added

traversing

traversing

traversing

adding new node to tail
255 was added

LIST
Info 5
Info 10
Info
Info abc
Info 255

Removing 5 from head
Searching abc
```

```
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PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE
powershell + - [] v x

traversing

adding new node to tail
abc was added

traversing

traversing

traversing

adding new node to tail
255 was added

LIST
Info 5
Info 10
Info
Info abc
Info 255

Removing 5 from head
Searching abc
Found!
abc
Address retrieved
removing abc

LIST
Info 10
Info
Info 255
```

Description

In the program, there are 4 files:

Node.h

It includes class Node with functions Node(info) and print().

Declaration.cpp

It includes the declaration of the functions to be executed in the program given in the question itself.

Functions.cpp

It includes the definition of the function.

isEmpty() checks if head is empty and returns true or false

addToHead(data) adds the data to the node as head if not empty

addToTail(data) adds newnode to the tail

add() just adds a newnode

removeFromHead () deletes the head and sets the next node as the head

search(data) returns a message 'found' if the input string matches the data and 'not found' if not matched

retrieve() retrieves the address of the data found through search

remove() deletes the node retrieved from retrieve()

traverse() gives the list of the data