

# Output

## Insertion

```
128 lst.insert(27)
129 lst.insert(25)
130 lst.insert(6)
131 lst.insert(12)
132 lst.insert(3)
133 lst.insert(10)
134 lst.insert(11)
135 lst.print()
136 lst.insert(50)
137 print('-----')
138 lst.print()
```

```
(base) C:\Users\User\Desktop\Sem 5\ADS>python Lab3.py
[3]
[3, 27]
[3, 6, 11, 19, 27]
[3, 6, 8, 9, 10, 11, 12, 19, 25, 27]
-----
[3]
[3, 27]
[3, 6, 11, 19, 27]
[3, 6, 8, 9, 10, 11, 12, 19, 25, 27, 50]
(base) C:\Users\User\Desktop\Sem 5\ADS>
```

## Search

```
128 lst.insert(27)
129 lst.insert(25)
130 lst.insert(6)
131 lst.insert(12)
132 lst.insert(3)
133 lst.insert(10)
134 lst.insert(11)
135 lst.insert(50)
136 lst.print()
137 lst.search(50)
```

```
[3, 6, 8, 9, 10, 11, 12, 25, 27, 50]

(base) C:\Users\User\Desktop\Sem 5\ADS>python Lab3.py
[3]
[3, 27]
[3, 6, 11, 19, 27]
[3, 6, 8, 9, 10, 11, 12, 19, 25, 27, 50]
Number of nodes to travel to search for given number 11
lvl 1
lvl 2
lvl 3
lvl 4
Number of nodes to travel using skip list for given number 6
(base) C:\Users\User\Desktop\Sem 5\ADS>
```

## Deletion

The image shows a Visual Studio Code window with the file `Lab3.py` open. The Explorer sidebar on the left shows a project structure with folders `ADS`, `Lab 4`, `Lab2`, and `Lab3`. Inside `Lab3`, there are files `Lab1.py`, `Lab2.cpp`, `Lab2.py`, `Lab3.py`, and `LinkedList.py`. The `Lab3.py` file is selected and its content is displayed in the editor. The code defines a linked list structure with `insert` and `delete` methods. The terminal at the bottom shows the command `python Lab3.py` being executed, which prints the state of the linked list at different points in the program.

```
Lab3.py X
127 lst.insert(27)
128 lst.insert(25)
129 lst.insert(6)
130 lst.insert(12)
131 lst.insert(3)
132 lst.insert(10)
133 lst.insert(11)
134 lst.insert(50)
135 lst.print()
136 lst.delete(19)
137 print('-----')
138 lst.print()
139
140
141
```

TERMINAL PROBLEMS OUTPUT DEBUG CONSOLE 2: cmd

```
[3, 27]
[3, 6, 11, 19, 27]
[3, 6, 8, 9, 10, 11, 12, 19, 25, 27, 50]

(base) C:\Users\User\Desktop\Sem 5\ADS>python Lab3.py
[3]
[3, 27]
[3, 6, 11, 19, 27]
[3, 6, 8, 9, 10, 11, 12, 19, 25, 27, 50]
-----
[3]
[3, 27]
[3, 6, 11, 27]
[3, 6, 8, 9, 10, 11, 12, 25, 27, 50]
```

Python 3.7.3 64-bit (User: virtualenv) 0 0 0 In 9, Col 25 Spaces: 4 UTF-8 CRLF Python