```
(llds) frame variable
(Nodestd::basic_string<char, std::char_traits<char>, std::allocator<char> >> *) this = 0x000600000288000 (const std::basic_string<char, std::char_traits<char>, std::allocator<char> > &) nem_entry = "apples": {
     value_= \
= {
    __l = (__cap_ = 32481138739011852,    __size_ = 4294976821,    __data_ = *\xf0#*)
    __s = {
                 __r = {
    __mords = ([0] = 32481138739011852, [1] = 4294976821, [2] = 12952811632)
    }
}
    3
  }
(lldb) thread step-in
Target 0: (Lab05) stopped.
(11db) thread step-in
 template <typename T>
Node<T>::Node(const T& new_entry) {
    entry = new entry;
    next_node = nullptr;
}
 template <typename T>
Node<T>::Node(const T& new_entry, Node<T>* new_next_node) {
0: (Lab05) stopped.
 (11db) thread step-in
Process 10090 stopped
 14
15 template <typename T>
16 Node<T>::Node(const T& new_entry, Node<T>* new_next_node) {
Target 0: (Lab05) stopped.
 (11db) thread step-in
Process 10090 stopped
 53
Target 0: (Lab05) stopped.
(11db) thread step-in
Process 10090 stopped
 Target 0: (Lab05) stopped.
(11bb) thread step-in
Process 18090 stopped

* thread #1, queue = 'com.apple.main-thread', stop reason = step in
frame #0 ** encoded #0 ** thread #1, queue = 'com.apple.main-thread', stop reason = step in
frame #0 ** encoded #
Target 8: (Lab85) stopped.
(Ildb) thread step-in
Process 1809 stopped
* thread #1, queue = 'com.apple.main-thread', stop reason = step in
frame #8: & woode@elooed@elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.elooed.
              template <typename T>
T Node<T>::getEntry() const {
 Target 0: (Lab05) stopped
```

```
(lldb) thread step-in
Process 10090 stopped
* thread #1, queue =
frame #0: 0x00000
49
50
                                                                      prev_ptr = getNodeAt(position - 1);
 55
Target 0: (Lab05) stopped.
(lldb) thread step-in
Process 10090 stopped
* thread #1, queue = 'com.
frame #0: 0x000000100
50 in:
                                                     om.apple.main-thread', stop reason = step in

1000028b8 Lab05'LinkedList<std::_1::basic_string<char, std::_1::char_traits<char>, std::_1::allocator<char> > ::insert(this=0x0000600000000000, position=1, new_entry="apples") at LinkedList.hpp:53:14

insert_ptr = new NodecT>(new_entry);

if (position = 1) {
    insert_ptr > setNext(headptr);
    headptr = insert_ptr;

} else {
                                                                      prev_ptr = getNodeAt(position - 1);
target_ptr = prev_ptr -> getNext();
       55
Target 0: (Lab65) stopped.

(lab1) thread step-in
Process 10090 stopped

**Traget 0: (Lab65) stopped.

(lab1) thread step-in
Process 10090 stopped

**Traget 0: (Lab65) stopped.

**Traget
                                                     <u>}</u> else {
       54
55
                                                                      {
  prev_ptr = getNodeAt(position - 1);
  target_ptr = prev_ptr -> getNext();
  insert_ptr -> setNext(target_ptr);
       56
57
o3 Target 0: (Lab05) stopped. Target 0: (Lab05) stopped. (lido) frame variable *headptr ((Nodectd:)basic_stringchar, std::char_traits<char>, std::allocator<char> >>) *headptr = {
    entry = 'apples'
    next_node = nullptr
  }
(lidb) frame variable *headptr
(Nodestd::basic_string<char, std::char_traits<char>, std::allocator<char> >>) *headptr = {
   entry = "apples"
   next_node = nullptr
    lldb) thread step-in
 /
m_length++;
} else {
       60
61
62
63
                                                      throw (std::runtime_error("invalid position\n"));
                                  }
  64 }
Target 0: (Lab05) stopped.
Target 0: (Lab65) stopped.
(lidb) thread step-in
Process 18000 stopped

* thread #1, queue = 'com.apple.main-thread', stop reason = step in
frame #0: 0x00000010000258e Lab65'Tester::run(this=0x00000004003640c3890) at Tester.cpp:14:16

11
22 void Tester::run() {
13
    try {
-> 14
        groceries -> insert(1, *annle**).
15
groceries -> insert(1, "apples");
groceries -> insert(2, "bananas");
groceries -> insert(3, "sweet potatoes");
groceries -> insert(4, "argula");
18
Target 0: (Lab85) stopped.
([10b) thread step-in
Process 10090 stopped

**Thread step-in
Process 10090 stopped

**Thread 9: One on apple.main—thread*, stop reason = step in

**Trame #8: One one one one one of 
bool valid_position = (position \geq = 1) && (position <= m_length + 1); if (valid_position) {
                                    if (valid_position = (position >= 1) &
if (valid_position) {
    Node<T>* insert_ptr = nullptr;
    Node<T>* prev_ptr = nullptr;
    Node<T>* target_ptr = nullptr;
bool valid_position = (position >= 1) && (position <= m_length + 1);
if (valid_position) {
      Node<T>* insert_otr = nullptr;
      Node<T>* prev_ptr = nullptr;
                                                      Node<T>* target_ptr = nullptr;
```

```
50 insert_ptr = new Node<T>(new_entry);
Target 0: (Lab65) stopped.
(lldb) htread step-in
Process 18890 stopped
* thread #1, queue = 'com.apple.main-thread', stop reason =:
frame #8: 0:0000000150002259 Lab65'LinkedListcstd::_1::
52
Target 0: (Lab05) stopped.
(lldb) thread step-in
Process 10090 stopped
* thread #1, queue = 'com.z
frame #0: 0x0000001000
47 Noc
                                                                      insert_ptr = new Node<T>(new_entry);
if (position == 1) {
    insert_ptr -> setNext(headptr);
    headptr = insert_ptr;
           51
           52
53
  template <typename T>
Node<T>::Node(const T& new_entry) {
   entry = new_entry;
   next_node = nullptr;
 12 Node();
-13 Node(const Ta new_entry);
14 Node(const Ta new_entry);
15 T getEntry() const;
16 void setEntry(const Tā new_entry);
17 Target 8: Labb6) stopped.
(lidb) thread step-in
Process 10899 stopped

**Traget 8: Labb6 stopped.**
(lidb) thread step-in
**Tra
                       template <typename T>
Node<T>::Node(const T& new_entry) {
   entry = new_entry;
   next_node = nullptr;
           12
13
    Target 0: (Lab05) stopped.
  9 template <typename T>
10 Node<T>::Node(const T& new_entry) {
                                            entry = new_entry;
next_node <u>=</u> nullptr;
}
           13
 14
15 template <typename T>
16 Node<15::Node(const Tā new_entry, Node<T>* new_entr_node) (
Target 0: (Lab65) stopped.
([lob] thread step—in
Process 18090 stopped.

([lob] thread step—in
Process 18090 stopped.

([lob] thread step—in
Process 18090 stopped.

([lob] thread step—in
Process 18090 stopped.

([lob] thread step—in
Process 18090 stopped.

([lob] thread step—in
I thread step—in
I node (Total Step—in) in thread step—in
I node (Total Step—in) in thread step—in
I entry = new_entry;

11 entry = new_entry;

12 next_node = nullptr;

-> 13 }
14
15 template <typename T>
16 Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>:Node<f>
                                                                       com.apple.main-thread', stop reason = step in

810000288d Lab05'LinkedList<std::_1::basic_string<char, std::_1::char_traits<char>, std::_1::allocator<char> > >::insert(this=0x0000000000000, position=2, new_entry="bananas") at LinkedList.hpp:50:20

Node(-)* insert_ptr = nullptr;

Node(-)* very ptr = nullptr;

Node(-)* target_ptr = nullptr;

insert_ptr = new Node(-)*(new_entry);

if (position == 1) {

    insert_ptr = setNext(headptr);
    headptr = insert_ptr;

ned.
  53
Target 0: (Lab05) stopped.
(11db) thread step-in
Process 10090 stopped
* thread #1, queue = 'com.
frame #0: 0x000000106
48
No
                                                                         om.apple.main=thread', stop reason = step in
18000289% Lab05'LinkedListsdd:__1:basic_string<char, std::__1:char_traits<char>, std::__1:allocator<char> >>::insert(this=0x000060000000000, position=2, new_entry="bananas") at LinkedList.hpp:51:16
Node<7> tray_ptr = nullptr;
Node<7> tray_ptr = nullptr;
insert_ptr = new Node<7>(new_entry);
if (position == 1) {
    insert_ptr = new Node<7> tray_ptr = new Node<7< tray_ptr = new Node<7< tray_ptr = new Node<7> tray_ptr = new Node<7< tray
    -> 51
52
```

```
} else {
                         {
    prev_ptr = getNodeAt(<u>position</u> - 1);
    target_ptr = prev_ptr -> getNext();
    insert_ptr -> setNext(target_ptr);
    prev_ptr -> setNext(insert_ptr);
58
Target 0: (Lab05) stopped.
(11db) thread step-in
Process 10090 stopped
template <typename T>
Node<T>* LinkedList<T>::getNodeAt(int position) {
bool valid_position = (position >= 1) && (position <= m_length); if (<u>valid_position</u>) {
  15
16
17
18
19
bool valid_position = (position >= 1) && (position <= m_length);
if (valid_position) {
   Nodect> _immer = nullptr;
   jumper = headptr;
   for (int i = 1; i < position; i++) {
        jumper = jumper -> getNext();
}
  16
17
18
19
20
21
21
Target 0: (Lab05) stopped.
(lldb) thread step-in
Process 10090 stopped
* thread #1, queue = 'com.a
            frame #0: 0x000000010
eturn (jumper);
Target 0: (Lab05) stopped.
(lldb) thread step-in
Process 10090 stopped
return (<u>jumper</u>);
            } else {
    throw (std::runtime_error("invalid position"));
Target 0: (Lab05) stopped.
(lldb) thread step-in
Process 10090 stopped
prev_ptr <u>=</u> getNodeAt(position
                         target_ptr = prev_ptr -> getNext();
insert_ptr -> setNext(target_ptr);
prev_ptr -> setNext(insert_ptr);
Target 0: (Lab05) stopped.
(11db) thread step-in
Process 10090 stopped
53
54
55
56
57
58
                         {
    prev_ptr = getNodeAt(position - 1);
    target_ptr = <u>prev_ptr</u> -> getNext();
    insert_ptr -> setNext(target_ptr);
    prev_ptr -> setNext(insert_ptr);
Target 0: (Lab05) stopped.
(lldb) thread step-in
Process 10090 stopped
{
    prev_ptr = getNodeAt(position - 1);
    target_ptr = prev_ptr -> getNext();
    insert_ptr -> setNext(target_ptr);
    prev_ptr -> setNext(insert_ptr);
59 }
Target 0: (Lab05) stopped.
(lldb) thread step-in
Process 10090 stopped
* thread #1, queue = 'com.
frame #0: 0x000000100
                  om.apple.main-thread', stop reason = step in
1000028fe Lab05'LinkedList<std::__1::basic_string<char, std::__1::char_traits<char>, std::__1::allocator<char> > >::insert(this=0x0000600000000000, position=2, new_entry="bananas") at LinkedList.hpp:57:4
} else {
55
56
-> 57
58
59
60
                         prev_ptr = getNodeAt(position - 1);
target_ptr = prev_ptr -> getNext();
insert_ptr -> setNext(target_ptr);
prev_ptr -> setNext(insert_ptr);
60 mg
Target 0: (Lab05) stopped.
(11db) thread step-in
Process 10090 stopped
* thread #1, queue = 'com.
   iread #1, queue = 'com.apple.main-thread', stop reason = step in
frame #0: 0x808080100802bc0 Lab85'Nodecstd::__1::basic_string<char, std::__1::char_traits<char>, std::__1::allocator<char>>>::setNext(this=0x0000600000208020, new_next_node=0x0000000000000000) at Node.hpp:28:14
```

```
template <typename T>
void Node<T>::setNext(Node<T>* new_next_node) {
    next_node = new_next_node;
}
31 template <typename
Target 0: (Lab05) stopped.
(lldb) thread step-in
Process 10090 stopped
30
31 template <typename T>
32 T Node<T>::getEntry() const {
Target 0: (Lab05) stopped.
(lldb) thread step-in
 Process 10090 stopped
### Company of the Co
30
31 template <typename
Target 0: (Lab05) stopped.
(lldb) thread step-in
63 }
Target 0: (Lab05) stopped.
(11db) thread step-in
Process 10090 stopped
Target 0: (Lab05) stopped.
(11db) thread step-in
Process 10090 stopped
<u>}</u>
65
66 template <typename T>
67 void LinkedListT>::remove(int position) {
Target 0: (Lab05) stopped.
(11db) thread step-in
Process 10090 stopped
 * thread #1, queue = frame #0: 0x0000
                                 'com.apple.main-thread', stop reason = step in
001000025d7 Lab05`Tester::run(this=0x0000003040c3890) at Tester.cpp:15:16
           eme #0: 0x0000000100002
void Tester::run() {
                                   groceries -> insert(1, "apples");
groceries -> insert(2, "bananas");
groceries -> insert(3, "sweet potatoes");
groceries -> insert(4, "argula");
Target 0: (Lab05) stopped.
larget o: (Lause) stupped.
(Ideb) frame variable agroceries->headptr
(Nodestd::basic_stringchar, std::char_traits<char>, std::allocator<char> >>) *groceries->headptr = {
entry = "apples"
next_node = 0x000060000200020
 )
(Ildub) frame variable *groceries->headptr->next_node
(Nodes*dd::basic_stringcchar, std::char_traits<char>, std::allocator<char> >) *groceries->headptr->next_node = {
entry = "bananas"
next_node = nullptr
 (lldb) step
    thread #1, queue = 'com.apple.main-thread', stop reason = step in
frame #0: 0x0000001000025cc Lab05'Tester::run(this=0x0000000004063890) at Tester.cpp:16:3
13 try {
 Process 10090 stopped
                                  groceries -> insert(1, "apples");
groceries -> insert(2, "bananas");
groceries -> insert(3, "sweet potatoes");
groceries -> insert(4, "argula");
..., -argula*);

19 groceries -> setEntry(2, "chickpeas*);
Target 0: (Lab05) stopped.
(Liab) step
(lids) step
Process 18090 stopped

* thread #1, queue = 'com.apple.main-thread', stop reason = step in
frame #8: 0x800000010000281d Labb5'LinkedList<std::__1::basic_string<char, std::__1::allocator<char> > >::insert(this=0x8000060000000000, position=3, new_entry='sweet potatoes') at LinkedList.hpp:45:
            template <typename T>
void LinkedList<T>:::insert(int position, const T& new_entry) {
(11db) step
```

```
Process 10090 stopped

* thread #1, queue = 'com.apple.main-thread', stop reason = step in

frame #0: 0:000000100002847 Labb65 LinkedList<std::__1::basic_string<char, std::__1::char_traits<char>, std::__1::allocator<char> > ::insert(this=0x00000000000000000, position=3, new_entry="sweet potatoes") at LinkedList.hpp://doi.org/10.1001/journal.pdf
        43 void LinkedList<T>::insert(int position, const T& new_entry) {
                                     bool valid position = (position >= 1) && (position <= m length + 1);
                                    bool valid_position = (position >= 1) &
if (valid_position) {
    Node<T>* insert_ptr = nullptr;
    Node<T>* prev_ptr = nullptr;
    Node<T>* target_ptr = nullptr;
 49 Node<T>* target 0: (Lab85) stopped.
(lidb) stop
Process 18090 stopped

* thread #1, queue = 'com.apple.main-thread', stop reason = step in
frame #8: 0x000000100002351 Lab85'LinkedList<std::__1::absic_string<char, std::__1::allocator<char> > >::insert(this=0x000000000000000, position=3, new_entry="sweet potatoes") at LinkedList.hpp:47:
172
       44
45
                                   Target 0: (Lab05) stopped.
  (libb) step
(libb)
                                    bool valid_position = (position >= 1) && (position <= m_length + 1);
if (valid_position) {
    Node<T>* insert_ptr = nullptr;
       45
46
47
                                   if (valid_position) {
    Node<T>* insert_ptr = nullptr;
                                                      Node<T>* Insert_ptr = nollptr;
Node<T>* prev_ptr = nullptr;
Node<T>* terget_ptr = nullptr;
insert_ptr = new Node<T>(new_entry);
if (position == 1) {
    insert_ptr -> setNext(headptr);
}
 52 insert_ptr -> setNext(headptr);
Target 0: (Lab05) stopped.
([ldb) step
Process 10000 stopped

**Three of the content of the
                                                      Node(7)* insert_ptr = nullptr;
Node(7)* rev_ptr = nullptr;
Node(7)* target_ptr = nullptr;
insert_ptr = new Node(7)(new_entry);
if (position == 1) {
insert_ptr -> setNext(headptr);
headptr = insert_ptr;
 53 headytr = insert_ptr;

Target 0: (Lab05) stopped.
([ldb) step

Process 10000 stopped

* thread #1, queue = 'com.apple.main-thread', stop reason = step in

frame #8: 0x000000100002094 Lab05' Nodexstd::_l::basic_string<char, std::_1::char_traits<char>, std::_1::allocator<char> >>::Node(this=0x0000000000000000, new_entry="sweet potatoes") at Node.hpp:10:35
                  template <typename T>
Node<T>::Node(const T& new_entry) {
   entry = new_entry;
   next_node = nullptr;
 13 }
Target 0: (Lab05) stopped.
  Process 10090 stopped
  * thread #1, queue = 'com.apple.main-thread', stop reason = step over

frame #8: 0x000000100002by0 Lab05'Node<std:__1::basic_string<char, std::__1::char_traits<char>, std::__1::allocator<char> > ::Node(this=0x00006000002bc000, new_entry="sweet potatoes") at Node.hpp:13:1
               rame #8: 6x000000100002by0 Lab05 Node:
Node<T>::Node(const T& new_entry) {
    entry = new_entry;
    next_node = nullptr;
        10
11
                Ł
48
49
 53
Target 0: (Lab05) stopped.
(lldb) next
Process 10090 stopped
* thread #1, queue = 'com.
          rread #1, queue = 'com.apple.main-thread', stop reason = step over
frame #0: 0x000000010000289a Lab05`LinkedList<std::_1::basic_string<char, std::__1::char_traits<char>, std::__1::allocator<char> > >::insert(this=0x000060000000000, position=3, new_entry="sweet potatoes") at LinkedList.hpp:51:
                                                       Node<T>* prev_ptr = nullptr;
                                                      Node<T>* prev_pir = noirpi;
Node<T>* target_ptr = nullptr;
insert_ptr = new Node<T>(new_entry);
if (position == 1) {
    nesert_ptr -> setNext(headptr);
    headptr = insert_ptr;
  49
50
-> 51
52
53
54
                                                        } else {
 insert_ptr -> setNext(headptr);
headptr = insert_ptr;
                                                      Target 0: (Lab05) stopped.
(11db) next
Process 10090 stopped
  * thread #1, queue = 'com.apple.main-thread', stop reason = step over
frame #0: 0x0000001000028f1 Lab05'LinkedList<std::__1::absic_string<char, std::__1::allocator<char> > >::insert(this=0x000060000000000, position=3, new_entry="sweet potatoes") at LinkedList.hpp:56:
                                                                         headptr = insert_ptr;
                                                                          {
prev_ptr = getNodeAt(position - 1);
target_ptr = <u>prev_ptr</u> -> getNext();
insert_ptr -> setNext(target_ptr);
prev_ptr -> setNext(insert_ptr);
 Target 0: (Lab05) stopped.
```

```
5.4
                                                   prev_ptr = getNodeAt(position - 1);
target_ptr = prev_ptr -> getNext();
insert_ptr -> setNext(target_ptr);
prev_ptr -> setNext(insert_ptr);
59 }
60 m_length++;
Target 0: (Lab05) stopped.
| Stight of Case of Ca
   55
56
57
                                                   prev_ptr = getNodeAt(position - 1);
target_ptr = prev_ptr -> getNext();
insert_ptr -> setNext(target_ptr);
prev_ptr -> setNext(insert_ptr);
 -> 58
59
57
58
                                                 insert_ptr -> setNext(target_ptr);
prev_ptr -> setNext(insert_ptr);
                        prevp(r -> setNext(Insert_p(r);
}
m_length++;
} else {
throw (std::runtime_error("invalid position\n"));
59
-> 60
58
                                                prev ptr -> setNext(insert ptr):
                                     }
m_length++;
                        } else {
    throw (std::runtime_error(*invalid position\n*));
-> 61
62
63
64
throw (std::runtime_error("invalid position\n"));
    62
63
<u>}</u>
      rread #1, queue = 'com.apple.main-thread', stop reason = step over
frame #0: 0x000000100002620 Lab05'Tester::run(this=0x00000003040c3890) at Tester.cpp:16:16
                         try {
                                     groceries -> insert(1, *apples*);
groceries -> insert(2, *bananas*);
groceries -> <u>insert(3, *sweet potatoes*);
groceries -> insert(4, *argula*);</u>
}
(lldb) frame variable *groceries->headptr->next_node
(lNdde<std::basic_string<char, std::char_traits<char>, std::allocator<char> > >) *groceries->headptr->next_node = {
 }
(lldb) frame variable *groceries->headptr->next_node->next_node
(Nodesctd::basic_stringcchar, std::char_traits<char>, std::allocator<char> > >) *groceries->headptr->next_node->next_node = {
    entry = "sweet potatoes"
    next_node = nullptr
(11db)
```