```
1: // $Id: linknode.cpp, v 1.1 2016-06-28 14:46:57-07 - - $
 3: #include <iostream>
 4: using namespace std;
 6: struct node;
 7: struct link {
 8:
       node* next {};
       node* prev {};
 9:
10: };
11: struct node: link {
       int value {};
13: };
14:
15: int main() {
16:
       node* nn = new node();
17:
       link* 11 = nn;
       nn = static_cast<node*> (11);
18:
       cout << "nn = " << nn << ", sizeof = " << sizeof (node) << endl;</pre>
19:
20:
       cout << "ll = " << ll << ", sizeof = " << sizeof (link) << endl;</pre>
21:
       char* p = new char;
       for (int i = 0; i < 8; ++i) {
22:
23:
          char* q = new char;
          cout << static_cast<void*> (q) << " " << q - p << endl;
24:
25:
          p = q;
26:
       }
27: }
28:
29: //TEST// linknode >linknode.out 2>&1
30: //TEST// mkpspdf linknode.ps linknode.cpp* linknode.out
31:
```

```
$cse111-wm/Assignments/asg3-listmap-templates/misc
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                                                                         1/1
 12:43:32
                                linknode.cpp.log
    1: @@@@@@@@@@@@@@@@@@@@@@@@@@@@@@ mkc: starting linknode.cpp
    2: checksource linknode.cpp
    3: ident linknode.cpp
    4: linknode.cpp:
            $Id: linknode.cpp, v 1.1 2016-06-28 14:46:57-07 - - $
    6: cpplint.py.perl linknode.cpp
    7: Done processing linknode.cpp
    8: q++ -Wall -Wextra -Wpedantic -Wshadow -fdiagnostics-color=never -std=gnu
++2a -Wold-style-cast -g -O0 linknode.cpp -o linknode -lm
    9: rm -f linknode.o
   10: @@@@@@@@@@@@@@@@@@@@@@@@@@@@@ mkc: finished linknode.cpp
```

10/22/19 \$cse111-wm/Assignments/asg3-listmap-templates/misc linknode.out

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1: nn = 0x211a010, sizeof = 24 2: l1 = 0x211a010, sizeof = 16 3: 0x211a050 32 4: 0x211a070 32 5: 0x211a090 32 6: 0x211a0b0 32 7: 0x211a0d0 32 8: 0x211a0f0 32

9: 0x211a110 32 10: 0x211a130 32