```cpp
 1: // $Id: linknode.cpp,v 1.1 2016-06-28 14:46:57-07 - - $
 2:
 3: #include <iostream>
 4: using namespace std;
 5:
 6: struct node;
 7: struct link {
 8:    node* next {};
 9:    node* prev {};
10: };
11: struct node: link {
12:    int value {};
13: };
14:
15: int main() {
16:    node* nn = new node();
17:    link* ll = nn;
18:    nn = static_cast<node*> (ll);
19:    cout << "nn = " << nn << ", sizeof = " << sizeof (node) << endl;
20:    cout << "ll = " << ll << ", sizeof = " << sizeof (link) << endl;
21:    char* p = new char;
22:    for (int i = 0; i < 8; ++i) {
23:       char* q = new char;
24:       cout << static_cast<void*> (q) << " " << q - p << endl;
25:       p = q;
26:    }
27: }
28:
29: //TEST// linknode >linknode.out 2>&1
30: //TEST// mkpspdf linknode.ps linknode.cpp* linknode.out
31:
```

```
 1: @@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@ mkc: starting linknode.cpp
 2: checksource linknode.cpp
 3: ident linknode.cpp
 4: linknode.cpp:
 5:      $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: g++ -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
```

```
 1: nn = 0xf07010, sizeof = 24
 2: ll = 0xf07010, sizeof = 16
 3: 0xf07050 32
 4: 0xf07070 32
 5: 0xf07090 32
 6: 0xf070b0 32
 7: 0xf070d0 32
 8: 0xf070f0 32
 9: 0xf07110 32
10: 0xf07130 32
```