move.cpp Page 1

```
#include <iostream>
#include <algorithm>
#include <memory>
#include <vector>
using namespace std;
int main() {
  vector<unique_ptr<int>> intPointers;
  for (int i = 0; i < 10; i++) {
   unique_ptr tmp = make_unique<int>();
    *tmp = i;
    //duing example: remove the move, and show that it wont copy
   intPointers.push_back(std::move(tmp));
  for_each(begin(intPointers), end(intPointers), [](const unique_ptr<int>& i) {
      cout << *i << " ";
  });
  cout << "\n";
  vector<unique_ptr<int>> morePointers;
 move(begin(intPointers), end(intPointers), back_inserter(morePointers));
  //After the move, those objects are now all nullptr
  cout << boolalpha;</pre>
  for_each(begin(intPointers), end(intPointers), [](const unique_ptr<int>& i) {
      cout << (i == nullptr) << " ";
  });
  cout << "\n";
  intPointers.clear(); //dont want to use them by accident!
  for_each(begin(morePointers), end(morePointers), [](const unique_ptr<int>& i) {
     cout << *i << " ";
  });
  cout << "\n";
  return 0;
}
```