|  |  |
| --- | --- |
| **Ex07-08.cpp:** *Deep Copy Issues* | |
| **Line#** | **Code** |
| 1  2  3  4  5  6  7  8  9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24  25  26  27  28  29  30  31  32  33  34  35  36  37  38  39  40  41  42  43  44  45  46  47  48  49  50  51  52  53  54  55  56  57  58  59  60  61  62  63  64 | #include <iostream>  using namespace std;  struct REC {  int a;  short b;  int\* pdata = NULL;  REC(int p1, short p2) {  a = p1;  b = p2;  pdata = new int[3];  cout << "Calling REC(int,short)" << endl;  }  REC() {  a = 0;  b = 0;  cout << "Calling REC()" << endl;  }  REC(const REC& rec) {  a = rec.a;  b = rec.b;  if (rec.pdata) {//There is a child  pdata = new int[3];  pdata[0] = rec.pdata[0];  pdata[1] = rec.pdata[1];  pdata[2] = rec.pdata[2];  }  }  ~REC() {  cout << "Calling ~REC()" << endl;  if (pdata) {  cout << "Returning the buffer" << endl;  delete[] pdata;  }  }    REC& operator=(const REC& rhs) {  cout << "Calling operator=" << endl;  if (pdata) delete[] pdata;  this->a = rhs.a;  this->b = rhs.b;  if (rhs.pdata) {  pdata = new int[3];  for (int i = 0; i < 3; i++) pdata[i] = rhs.pdata[i];  }  else pdata = NULL;  return \*this;  }    };  int main() {  REC x(5, 10);  REC y;  REC z= x; //Object initialization  cout << "x.a is " << x.a << "\tx.b is " << x.b << endl;  cout << "y.a is " << y.a << "\ty.b is " << y.b << endl;  cout << "z.a is " << z.a << "\tz.b is " << z.b << endl;  x.operator=(z); //Assignment  return 0;  } |