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| **EX11-06.cpp:** *From struct to class* | |
| **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 | #include <iostream>  using namespace std;  class Student {  public:  const char\* Name;  unsigned char Age;  float CGPA;  Student(const char\* Name, unsigned char age, float cgpa) :Name(Name) {  if ((age == 0) || (age > 128)) throw "Is this human?!";  Age = age;  if ((cgpa < 0) || (cgpa > 4)) throw "Invalid CGPA!";  CGPA = cgpa;  cout << "Calling constructor(name,age,cgpa) for " << Name << endl;  }  Student() :Name("<No Name>"), Age(18), CGPA(4.0) {  cout << "Calling constructor() for " << Name << endl;  }  ~Student() {  cout << "Calling destructor for " << Name << endl;  }  };  void F(const char\* name) {  static Student s(name, 18, 3.15F);  Student s2;  }  Student ali("Ali", 32, 2.75F);  static Student abu("Abu", 22, 3.75F);  int main() {  cout << "First call..." << endl;  F("Alibaba");  cout << "Second call..." << endl;  F("Abumama");  Student\* ps = new Student("Afendi", 24, 3.22F);  cout << "After Afendi is created..." << endl;  delete ps;  cout << "main() is ending..." << endl;  return 0;  } |