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| Student.h | |
| Line# | Code |
| 1  2  3  4  5  6  7  8  9  10 | #pragma once  class Student {  public:  const char\* Name;  unsigned char Age;  float CGPA;  inline Student(const char\* name, unsigned char age, float cgpa);  inline Student();  inline ~Student();  }; |

|  |  |
| --- | --- |
| Student.cpp | |
| Line# | Code |
| 1  2  3  4  5  6  7  8  9  10  11  12  13  14  15  16 | #include <iostream>  using namespace std;  #include "Student.h"  Student::Student(const char\* name, unsigned char age, float cgpa) :  Name(name), Age(age), CGPA(cgpa) {  cout << "Calling Student(name, age, cgpa) for " << Name << endl;  }  Student::Student() :  Name("<No Name>"), Age(18), CGPA(4.0F) {  cout << "Calling Student() for " << Name << endl;  }  Student::~Student() {  cout << "Calling ~Student() for " << Name << endl;  } |

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| **EX12-01.cpp: *malloc*** *Vs* ***new*** | |
| **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 | #include <iostream>  using namespace std;  #include "Student.h"  int main() {  //int\* pi = (int\*)malloc(5 \* sizeof(int));  //free(pi);  //int\* pi = new int(5);  //delete pi;  //int\* pi = new int[5];  //delete[] pi;  //Student\* ps = new Student("Yong Tau Foo",21,3.1F);  //Student\* ps = new Student[5];  Student\* ps = (Student\*)malloc(5 \* sizeof(Student));  //cout << "Do something here...\n";  //cout << "Use student " << ps->Name << endl;  //delete ps;  //delete[] ps;  free(ps);  cout << "main() is ending..." << endl;  return 0;  } |