## Structures

```
using namespace std;
#include <iostream>
                               The variables in the old
                                                              { int id;
                               version that are related to
                               the employee are now in the
                                                              statetax:
                               structure emprecord and are
                                                              };
  int main ()
                               considered to be fields in
                                                               int main ()
  { int id,i;
                               the structure.
     double gross, hours, rat
                                                                 { int i;
      fedtax, statetax;
                                        The variables in the
      //----
                                         old version that are
      for (i=0; i<3; i++)
      {cout << " Enter id ";
                                        related to the
        cin >> id;
                                        employee now are
        cout << " Enter Hours ==> ";
                                        now fields of the
         cin >> hours;
                                        variable name (in
         cout << " Enter Rate ==> ";
                                         this case employee)
        cin >> rate;
                                        and must be referred
      //----
                                        to with the variable
                                        name, followed by a
         gross = hours*rate;
                                        period and the field
        net = gross*0.7;
      //-----
                                        name.
         cout.setf(ios::fixed);
         cout.setf(ios::showpoint);
         cout.precision(2);
         cout << "Gross : $ " << gross << "\t";</pre>
         cout << "Hours : " << hours << endl;</pre>
         cout << "Rate : " << rate << endl;</pre>
         cout << "net : " << net << endl;</pre>
      return (0);
```

```
using namespace std;
#include <iostream>
struct emprecord
      double gross, hours, rate, net, fed, state, fica, fedtax,
                                The variable employee is declared
                               to be of type emprecord.
     emprecord employee; ←
     //-----
     for (i=0; i<3; i++)
      {cout << " Enter id ";
       cin >> employee.id;
        cout << " Enter Hours ==> ";
        cin >> employee.hours;
      → cout << " Enter Rate ==> ";
        cin >> employee.rate;
      ★ employee.gross = employee.hours* employee.rate;
        employee.net = employee.gross*0.7;
        cout.setf(ios::fixed);
        cout.setf(ios::showpoint);
        cout.precision(2);
        cout << "Gross : $ " << employee.gross << "\t";</pre>
        cout << "Hours : " << employee.hours << endl;</pre>
        cout << "Rate : " << employee.rate << endl;</pre>
        cout << "net : " << employee.net << endl;</pre>
     return (0);
```