If (conditional) Statements

```
using namespace std;
#include <iostream>

int main ()

{int id;
      double gross, hours, rate, net, fed, state, fica, total;

      //-----------------------------------------------------
         cout << "Enter Employee Id: " ;
         cin >> id;
         cout << "Enter Employee hours worked: " ;
         cin >> hours;
         cout << "Enter Employee pay rate: " ;
         cin >> rate;
      //-----------------------------------------------------
         gross = hours* rate;
         fed=gross*0.2;
         state=gross*0.05;
         fica=gross*0.0765;
         total=fed+state+fica;
         net = gross-total;
      //-----------------------------------------------------
         cout.setf(ios::fixed);
         cout.setf(ios::showpoint);
         cout.precision(2);
         cout << "Gross : $ " <<  gross <<  "\t";
         cout << "Hours : " <<  hours <<  endl;
         cout << "Rate  : " <<  rate <<  endl;
         cout << "net   : " <<  net <<  endl;
 return (0);
}
```

```
using namespace std;
#include <iostream>

int main ()

{int id;
      double gross, hours, rate, net, fed, state, fica,
      total, reghours,regpay,overpay,overhours;
      //-----------------------------------------------------
         cout << "Enter Employee Id: " ;
         cin >> id;
         cout << "Enter Employee hours worked: " ;
         cin >> hours;
         cout << "Enter Employee pay rate: " ;
         cin >> rate;
      //-----------------------------------------------------
         if (hours>40)
             { reghours=40;
               overhours=hours-40;
             }
           else
             { reghours=hours;
               overhours=0;
             }
         regpay=reghours*rate;
         overpay=overhours*rate*1.5;
         gross = overpay+regpay;
         fed=gross*0.2;
         state=gross*0.05;
         fica=gross*0.0765;
         total=fed+state+fica;
         net = gross-total;
      //-----------------------------------------------------
         cout.setf(ios::fixed);
         cout.setf(ios::showpoint);
         cout.precision(2);
         cout << "Gross : $ " <<  gross <<  "\t";
         cout << "Hours : " <<  hours <<  endl;
         cout << "Rate  : " <<  rate <<  endl;
         cout << "net   : " <<  net <<  endl;
 return (0);
}
```

The program can adjust for more than one scenario through the use of the ***if*** statement. In addition, the output section now can print information of overtime hours and pay and regular hours and pay.

If (multi-conditional) Statements

```
using namespace std;
#include <iostream>

int main ()
{int id;
      double gross, hours, rate, net, fed, state, fica, total;
      //-----------------------------------------------------
         cin >> id >> hours >> rate;
      //-----------------------------------------------------
         gross = hours* rate;
         fed=gross*0.2;
         state=gross*0.05;
         fica=gross*0.0765;
         total=fed+state+fica;
         net = gross-total;
      //-------------------------------
         cout.setf(ios::fixed);
         cout.setf(ios::showpoint);
         cout.precision(2);
         cout << "Gross : $ " <<  gross <<  "\t";
         cout << "Hours : " <<  hours <<  endl;
         cout << "Rate  : " <<  rate <<  endl;
         cout << "net   : " <<  net <<  endl;
 return (0);
}
```

This section of code is implemented in a table as follows:

Gross	Federal tax rate	State tax rate
0-200	0	0
>200and<= 400	15%	3%
>400and<= 800	27%	4%
>8	31%	5%

The program only reaches each successive ***else if*** if a previous comparison has not been selected.

```
using namespace std;
#include <iostream>

int main ()
{int id; double fedtaxrate, statetaxrate;
  double gross, hours, rate, net, fed, state, fica, total;
      //-----------------------------------------------------
         cin >> id >> hours >> rate;
      //-------------------------
         gross = hours* rate;
         if (gross <=200)
           { fedtaxrate=0;
             statetaxrate=0;
           }
           else if (gross <=400)
             { fedtaxrate=0.15;
               statetaxrate=0.03;
             }
             else if (gross <=800)
               { fedtaxrate=0.27;
                 statetaxrate=0.04;
               }
               else
                 { fedtaxrate=0.31;
                   statetaxrate=0.5;
                 }
         fed=gross*fedtaxrate;
         state=gross*statetaxrate;
         fica=gross*0.0765;
         total=fed+state+fica;
         net = gross-total;
      //-----------------------------------------------------
         cout << "Gross : $ " <<  gross <<  "\t";
         cout << "Hours : " <<  hours <<  endl;
         cout << "Rate  : " <<  rate <<  endl;
         cout << "net   : " <<  net <<  endl;
 return (0);
}
```

If the gross pay is less than or equal to 200, then the program set the federal and state tax rates to zero and proceeds to the next section.