```
using namespace std;
#include <iostream>
int main()

   { double reghours,overhours, regpay,overpay,hours,rate,gross,net;
      double total,totalgross,fica,fed,state,taxes;
      int i,count,id ;

      totalgross=0;
      cout << "Enter ID ";
      cin >> id;
      count=0;


      while (id > 0)
      {  count++;
         total=0;


         for (i=0;i<7;i++)
         {
            cout << "Enter Hours for " ;

            switch (i)
            {
               case 0 : cout << "Sunday";
                  break;
               case 1 : cout << "Monday";
                  break;
               case 2 : cout << "Tuesday";
                  break;
               case 3 : cout << "Wednesday";
                  break;
               case 4 : cout << "Thursday";
                  break;
               case 5 : cout << "Friday";
                  break;
               case 6 : cout << "Saturday";
                  break;
            }
            cout << " ==> ";
            cin >> hours;
            total+=hours;
         }
         cout << "Enter rate ";
         cin >> rate;
         gross=total*rate;
         totalgross+=gross;
         taxes=gross*.3;
         net = gross -taxes;
         cout.setf(ios::fixed);
         cout.setf(ios::showpoint);
         cout.precision(2);
         cout << "\n\nID : "<< id<<endl;
         cout << "Gross : "<< gross<<endl;
         cout << "Net Pay : " << net<<"\n\n";
         cout << "Enter ID ";
         cin >> id;
      }
      cout << "Total Company Pay : " << totalgross<<"\n\n";
      cout << "Total Company employeehaw : " << count<<"\n\n";
       return 0;
   }
```

This is the priming of the loop control variable. (id in this case; the assumption is that only a positive id is allowed)

This is the ***counter*** for the number of employees of the firm.

This is the outside loop; it is a sentinel loop which allows it to work for an unknown number of times. (The ***while*** loop was chosen to allow for an unknown number of employees) The control variable must be primed with a value before the loop is reached; it also must have a new value to check at the end of the loop.

This is the inside loop; it is a ***for*** loop which works a fixed number of times. The ***for*** loop was selected since there are a fixed number days in the week

This is the switch statement; it is using the counter for the ***for*** loop (counter i) to determine which day of the week is to be printed as part of the user prompt.

This is the ***accumulator*** for the total hours an employee works in a week.

Accumulators change by the value being added to them, while ***counters*** generally increment by a set value, usually being +1 or -1. In other languages, this written as
total=total+hours;

This is the end of the outside loop; it is primed with a new value of the next employee. The control variable must be primed with a new value before the loop is repeated; otherwise an infinite loop situation develops.