```
// This program demonstrates overloaded functions to calculate
// the gross weekly pay of hourly-paid or salaried employees.
#include <iostream>
#include <iomanip>
using namespace std;

// Function prototypes
void getChoice(char &);
double calcWeeklyPay(int, double);
double calcWeeklyPay(double);

int main()
{
   char selection;   // Menu selection
   int worked;       // Hours worked
   double rate;      // Hourly pay rate
   double yearly;    // Yearly salary

   // Set numeric output formatting.
   cout << fixed << showpoint << setprecision(2);

   // Display the menu and get a selection.
   cout << "Do you want to calculate the weekly pay of\n";
   cout << "(H) an hourly-paid employee, or \n";
   cout << "(S) a salaried employee?\n";
   getChoice(selection);

   // Process the menu selection.
   switch (selection)
   {
      // Hourly-paid employee
      case 'H' :
      case 'h' :  cout << "How many hours were worked? ";
                  cin >> worked;
                  cout << "What is the hour pay rate? ";
                  cin >> rate;
                  cout << "The gross weekly pay is $";
                  cout << calcWeeklyPay(worked, rate) << endl;
                  break;

      // Salaried employee
      case 'S' :
      case 's' :  cout << "What is the annual salary? ";
                  cin >> yearly;
                  cout << "The gross weekly pay is $";
                  cout << calcWeeklyPay(yearly) << endl;
                  break;
   }
   return 0;
}

//*************************************************************
// Definition of function getChoice.                          *
// The parameter letter is a reference to a char.             *
// This function asks the user for an H or an S and returns   *
// the validated input.                                       *
//*************************************************************
```

```
void getChoice(char &letter)
{
   // Get the user's selection.
   cout << "Enter your choice (H or S): ";
   cin >> letter;

   // Validate the selection.
   while (letter != 'H' && letter != 'h' &&
          letter != 'S' && letter != 's')
   {
      cout << "Please enter H or S: ";
      cin >> letter;
   }
}

//*************************************************************
// Definition of overloaded function calcWeeklyPay.          *
// This function calculates the gross weekly pay of          *
// an hourly-paid employee. The parameter hours holds the    *
// number of hours worked. The parameter payRate holds the   *
// hourly pay rate. The function returns the weekly salary.  *
//*************************************************************

double calcWeeklyPay(int hours, double payRate)
{
   return hours * payRate;
}

//*************************************************************
// Definition of overloaded function calcWeeklyPay.          *
// This function calculates the gross weekly pay of          *
// a salaried employee. The parameter holds the employee's   *
// annual salary. The function returns the weekly salary.    *
//*************************************************************

double calcWeeklyPay(double annSalary)
{
   return annSalary / 52;
}
```