```cpp
//  Attached:   HW_1a, HW_1b
//
// ============================================================
//  File:   HW-1a
// ============================================================
//   Programmer:   Stephen Moye
//   Class:        CMPR 121 Tuesday
//   Instructor:   Dennis Rainey
//
//   Description:
//   This function calculates the amount of a sale, the
//   commission of the sale, and the total pay.
// ============================================================

#include <iostream>
#include <iomanip>

using namespace std;

int getSalesAmt();
int calcCommission(float sales);
int calcPay(float commission);
void displayPay(float sales, float commission, float total);

const float BASE_PAY = 2500.00;

//  ================================================================================
//  main
//  ================================================================================
int main() {
    float sales = 0;
    float commission = 0;
    float total = 0;

    sales = getSalesAmt();
    commission = calcCommission(sales);
    total = calcPay(commission);
    displayPay(sales, commission, total);

    return 0;
}
//  ================================================================================
//  end of main
//  ================================================================================



//  ================================================================================
//  getSalesAmt
//  ================================================================================
//  This function prompts the user to enter their monthly sales in dollars
//
```

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53  //  Input:
54  //      no parameters
55  //  Output:
56  //      the dollar amount of sales as a float, returns to main()
57  //  ========================================================================
58  int getSalesAmt()
59  {
60      float sales;
61
62      cout << "Enter monthly sales amount: " << endl;
63      cin >> sales;
64
65      return sales;
66  }
67  //  ========================================================================
68  //  end of getSalesAmt
69  //  ========================================================================
70
71
72
73  //  ========================================================================
74  //  calcCommission
75  //  ========================================================================
76  //  This function takes the value of sales and tests it against 3 commission
      tiers
77  //  that determine the percentage of commission from the calculation.
78  //
79  //  Input:
80  //      sales - the dollar amount in sales, passed from main()
81  //  Output:
82  //      the commission amount is calculated by a percentage of the sales amount
83  //      and returned to main()
84  //  ========================================================================
85  int calcCommission(float sales)
86  {
87      int commission;
88
89      if (sales > 50000)
90          commission = sales * .02;
91      else if (sales >= 25000 && sales <= 50000)
92          commission = sales * .015;
93      else
94          commission = 0;
95
96      return commission;
97  }
98  //  ========================================================================
99  //  end of calcCommission
100 //  ========================================================================
101
102
103
```

```cpp
//  ============================================================================
//  calcPay
//  ============================================================================
//  This function calculates the total monthly pay for the sales worked
//  adding the commission to the base pay
//  Input:
//      commission - the dollar amount in commission result from calcCommission
//  Output:
//      the total pay is calculated and returned to main()
//  ============================================================================
int calcPay(float commission)
{
    float total;
    total = commission + BASE_PAY;

    return total;
}
//  ============================================================================
//  end of calcPay
//  ============================================================================



//  ============================================================================
//  displayPay
//  ============================================================================
//  This function calculates the total monthly pay for the sales worked
//  adding the commission to the base pay
//  Input:
//      commission - the dollar amount in commission result from calcCommission
//  Output:
//      the total pay is calculated and returned to main()
//  ============================================================================
void displayPay(float sales, float commission, float total)
{
    cout << "Monthly sales:\t $ " << setprecision(2) << fixed << sales << endl << endl;
    cout << "Commission:\t $ " << setprecision(2) << commission << endl << endl;
    cout << "Base Pay:\t $ " << setprecision(2) << BASE_PAY << endl << endl;
    cout << "Total Pay:\t $ " << setprecision(2) << total << endl << endl;

    char again;

    cout << "Do it again? (Y/N) ";
    cin >> again;

    if (toupper(again) == 'Y')
    {
        main();
    }
}
//  ============================================================================
```

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155 //  end of displayPay
156 //  ============================================================================
```