// Attached: HW\_1a, 1b, 1c, 1d

// ====================================================

// File: HW\_1a.cpp

// ====================================================

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// Class: CIS 17A

// Instructor: Dennis Rainey

//

// Description:

// This program calculates the total amount of

// pay a salesperson has made, including the

// amount of commission based on the sales amount.

// ====================================================

#include <iostream>

#include <iomanip>

using namespace std;

int getSalesAmt();

int calcCommission(int sales);

int calcPay(int commission);

void displayPay(int sales, int commission, int pay);

char runAgain();

// ==== main ===========================================

//

// =====================================================

int main()

{

int sales;

int commission;

int pay;

char answer;

sales = getSalesAmt();

commission = calcCommission(sales);

pay = calcPay(commission);

displayPay(sales, commission, pay);

answer = runAgain();

while (answer == 'Y' || answer == 'y')

{

sales = getSalesAmt();

commission = calcCommission(sales);

pay = calcPay(commission);

displayPay(sales, commission, pay);

answer = runAgain();

}

return 0;

} // end of main()

// ===============================================================

// ======= getSalesAmt ============================================

// This function will get the amount of sales made by the user and

// return the value to main.

//

// Input:

// A number that will represent the total amount of sales.

//

// Output:

// An int value, that will be returned and used to calculate

// the commission and total pay.

// =================================================================

int getSalesAmt()

{

int sales;

cout << "Enter monthly sales amount: ";

cin >> sales;

return sales;

} // end of getSalesAmt()

// =================================================================

// ======= calcCommission ===========================================

// This function will calculate the total amount of commission the

// user has made based on the sales amount and will return that value

// to main.

//

// Input:

// A number that will be a representation of the sales amount wil

// be mulitplied by different percentage amounts depending on the

// amount entered by the user.

//

// Output:

// The commission will be calculated based on the sales amount

// and returned to main.

// ==================================================================

int calcCommission(int sales)

{

int commission;

if (sales > 50000)

{

commission = sales \* .02;

}

if (sales >= 25000 & sales <= 50000)

{

commission = sales \* .015;

}

if (sales < 25000)

{

commission = 0;

}

return commission;

} // end of calcCommission()

// =================================================================

// ============ calcPay =============================================

// This function will calculate the users total amount of pay and

// and return that value to main.

//

// Input:

// A number that will represent the commission will be added to

// the base pay amount.

//

// Output:

// The pay will be calculated by adding the base pay amount of

// $2,500 to the commission amount that will be passed through.

// Then this value will be returned to main as the total pay.

// =================================================================

int calcPay(int commission)

{

int pay;

pay = 2500 + commission;

return pay;

} // end of calcPay()

// =================================================================

// ============= displayPay =========================================

// This function will display the monthly sales amount entered by

// the user and will display the calulated commission and final pay

// with the base pay amount.

//

// Input:

// The number entered by the user for the sales amount and the

// commission and total pay calculated by the previous functions.

//

// Output:

// The other values are passed in from the other functions and

// displayed in a table format with proper spacing.

// =================================================================

void displayPay(int sales, int commission, int pay)

{

cout << "\n";

cout << "Monthly Sales: $" << setw(5) << sales << ".00" << "\n";

cout << "Commission: $" << setw(5) << commission <<".00" << "\n";

cout << "Base Pay: $" << setw(5) << 2500 << ".00" << "\n";

cout << "Total Pay: $" << setw(5) << pay << ".00" << "\n";

} // end of displayPay()

// =================================================================

// =================== runAgain =====================================

// This function will as the user if they would like to repeat the

// program and calculate another total pay amount.

//

// Input:

// A letter of 'y' or 'n' will be input by the user.

//

// Output:

// The letter will be taken and returned to main where the

// user will be able to enter another sales amount or exit

// the program.

// =================================================================

char runAgain()

{

char answer;

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

cin >> answer;

cout << "\n";

if (answer == 'Y' || answer == 'y')

{

return answer;

}

if (answer == 'N' || answer == 'n')

{

return answer;

}

} // end of runAgain()

// ===================================================================

/\* ==== OUTPUT =======================================================

Enter monthly sales amount : 65000

Monthly Sales : $65000.00

Commission : $ 1300.00

Base Pay : $ 2500.00

Total Pay : $ 3800.00

Do it again? (Y / N) n

Press any key to continue . . .

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