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// Attached: HW 1(a-e)
// File: HW_1a.pdf
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//
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//
// Program: Calculate Total Pay
//
// Description:
// Program Calculates the total pay from the monthly sales amount and the
// commission based on the sales amount.
//
//
#include <iostream>
#include <string>
// Function Prototypes
float getSalesAmount();
float calcCommission(float);
float calcPay(float);
void displayPay(float, float, float);
//
// main
//
int main() {
std::string loop;
do {
// Declaring Variables
loop = "";
float salesAmount;
float commission;
float totalPay;

// Function to get the sales amount
salesAmount = getSalesAmount();

// function used to calculate the commission based on the sales amount
commission = calcCommission(salesAmount);
// function used to determine the total pay based on sales amount and
// commission
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totalPay = calcPay(commission);
// function used to display the total pay
displayPay(salesAmount, commission, totalPay);

std::cout << "loop? (y/*)" << '\n';
std::cin >> loop;

} while (loop[0] == 'y');
return 0;
} // end of main

// getSalesAmount
// This fucntion prompts the user to enter the monthly sales amount
// returns salesAmount to main
//
// Input: monthly sales amount inputted by user
// Output: salesAmount returned to main

float getSalesAmount() {
float salesAmount = 0;
std::cout << "Enter sales amount " << '\n';
std::cin >> salesAmount;
return salesAmount;
}

// calcCommission
// This function calculates the commission based on the sales amount
// returns the total commission amount to main
//
// Input: Sales amount
// Output: commission

float calcCommission(float salesAmount) {
float commissionRate = 0;
if (salesAmount > 50000) {
commissionRate = 0.2;
} else if (salesAmount > 25000) {
commissionRate = 0.15;
} else {
commissionRate = 0;
}
return salesAmount * commissionRate;
```

```
}
// calcPay
// This function calculates the total pay based on monthly pay and commission
// returns totalPay to main
//
// Input: monthly pay and commission
// Output: total pay

float calcPay(float commission) {
const int PAY = 2500;
return PAY + commission;
}

// displayPay
// function displays all important values
//
// Input: salesAmount, Commission, totalPay
// Output: prints all values to console

void displayPay(float salesAmount, float commission, float totalPay) {
std::cout << "Monthly Sales: " << salesAmount << '\n';
std::cout << "Commission: " << commission << '\n';
std::cout << "Base Pay: " << totalPay - commission << '\n';
std::cout << "Total Pay: " << totalPay << '\n';
}
```