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

// Attached: HW\_1abcd

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

// Program: HW\_1a.ccp

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

// Programmer: Milo Fisher

// Class: CS 1B

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

#include<iostream>

#include<iomanip>

using namespace std;

double getSalesAmt();

double calcCommission(double);

double calcPay(double,double);

void displayPay(double,double,double,double);

int main()

{

double sales;

double commission;

double basePay = 2500;

double pay;

char response;

do

{

sales = getSalesAmt();

commission = calcCommission(sales);

pay = calcPay(basePay,commission);

displayPay(sales,commission,basePay,pay);

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

cin >> response;

}while(toupper(response) == 'Y');

return 0;

}

double getSalesAmt()

{

double amt;

cout << "Enter the monthly sales amount: ";

cin >> amt;

return amt;

}

double calcCommission(double sales)

{

double commission;

if(sales > 50000)

commission = sales \* .02;

else if(sales > 25000)

commission = sales \* .015;

else

commission = 0;

return commission;

}

double calcPay(double basePay,double commission)

{

double pay = basePay + commission;

return pay;

}

void displayPay(double sales, double commission, double basePay, double pay)

{

cout.width(15); cout << left << "Monthly Sales:" << right << "$ " << fixed << setprecision(2) << sales << endl;

cout.width(15); cout << left << "Commission:" << right << "$ " << fixed << setprecision(2) << commission << endl;

cout.width(15); cout << left << "Base Pay:" << right << "$ " << fixed << setprecision(2) << basePay << endl;

cout.width(15); cout << left << "Total Pay:" << right << "$ " << fixed << setprecision(2) << pay << endl;

}

// ======= OUTPUT =========

/\*

Enter the monthly sales amount: 60000

Monthly Sales: $ 60000.00

Commission: $ 1200.00

Base Pay: $ 2500.00

Total Pay: $ 3700.00

Do it again? (Y/N) n

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

// Attached: HW\_1abcd

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

// Program: HW\_1b.ccp

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

// Programmer: Milo Fisher

// Class: CS 1B

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

#include<iostream>

using namespace std;

void getTemps(double&, double&, double&);

double calcAvg(double,double,double);

void displayAvg(double);

int main()

{

double temp1;

double temp2;

double temp3;

getTemps(temp1,temp2,temp3);

displayAvg(calcAvg(temp1,temp2,temp3));

return 0;

}

void getTemps(double& temp1, double& temp2, double& temp3)

{

cout << "Enter the temperatures of 3 cities.\n#1:\t";

cin >> temp1;

cout << "#2:\t";

cin >> temp2;

cout << "#3:\t";

cin >> temp3;

}

double calcAvg(double temp1, double temp2, double temp3)

{

double avg = (temp1+temp2+temp3)/3;

return avg;

}

void displayAvg(double avg)

{

cout << "\nThe average temperature is " << avg << " degrees.";

}

// ======= OUTPUT =========

/\*

Enter the temperatures of 3 cities.

#1: 77.5

#2: 82.5

#3: 71.0

The average temperature is 77 degrees.

\*/

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

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

// Attached: HW\_1abcd

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

// Program: HW\_1c.ccp

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

// Programmer: Milo Fisher

// Class: CS 1B

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

#include<iostream>

using namespace std;

void getTemps(double temps[]);

double calcAvg(double temps[]);

void displayAvg(double);

int main()

{

double temps[3];

getTemps(temps);

displayAvg(calcAvg(temps));

return 0;

}

void getTemps(double temps[])

{

cout << "Enter the temperatures of 3 cities.\n#1:\t";

cin >> temps[0];

cout << "#2:\t";

cin >> temps[1];

cout << "#3:\t";

cin >> temps[2];

}

double calcAvg(double temps[])

{

double avg = (temps[0]+temps[1]+temps[2])/3;

return avg;

}

void displayAvg(double avg)

{

cout << "\nThe average temperature is " << avg << " degrees.";

}

// ======= OUTPUT =========

/\*

Enter the temperatures of 3 cities.

#1: 66.5

#2: 73.9

#3: 92.8

The average temperature is 77.7333 degrees.

\*/

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

// Attached: HW\_1abcd

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

// Program: HW\_1d.ccp

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

// Programmer: Milo Fisher

// Class: CS 1B

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

#include<iostream>

using namespace std;

int main()

{

int idNumbers[5] = {12345, 54321, 11223, 33211, 44411};

int search;

bool fail = true;

cout << "Enter an ID number to be searched: ";

cin >> search;

for(int i = 0; i < 5; i++)

{

if(idNumbers[i] == search)

{

cout << "ID number is located at index " << i << ".\n";

fail = false;

}

}

if(fail)

cout << "ID number is not on the list.\n";

return 0;

}

// ======= OUTPUT =========

/\*

Enter an ID number to be searched: 54321

ID number is located at index 1.

===========================

Enter an ID number to be searched: 14327

ID number is not on the list.

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