1. Sum, Difference, Product of 2 numbers

Write a program that prompts the user to enter two numbers, the program calculates the sum, difference and the product of these two numbers and store the value in a variable named sum, difference and product.  Display sum, difference and the product of these two numbers on the screen.

|  |  |  |
| --- | --- | --- |
| Input | Process | Output |
| num1  num2 | 1. Declare variables 2. Get input for num1 and num2 3. Calculate sum 4. Calculate difference 5. Calculate product 6. Display output | sum  difference  product |

Code-

//Dylan Nguyen, 9/1/2020

//Chapter 2 Quiz- #1) Sum, Difference, Product of 2 numbers

#include <iostream>

using namespace std;

int main()

{

double num1, num2, sum, difference, product;

//Enter 2 numbers

cout << "Enter Number 1:\n";

cin >> num1;

cout << "Enter Number 2:\n";

cin >> num2;

//sum

sum = num1 + num2;

cout << num1 << " + " << num2 << " = " << sum << endl;

//difference

difference = num1 - num2;

cout << num1 << " - " << num2 << " = " << difference << endl;

//product

product = num1 \* num2;

cout << num1 << " \* " << num2 << " = " << product << endl;

system("pause");

return 0;

}

1. Sales Discount

Macy is giving a 10% discount. Based on that percentage, write a program that will create the discount value from the original price. Display the discount amount, and the sales price after the discount.

|  |  |  |
| --- | --- | --- |
| Input | Process | Output |
| originalPrice | 1. Declare variables 2. Get input for originalPrice 3. Calculate discountAmount discountAmount = originalPrice \* 0.10 4. Calculate discountPrice   discountPrice = originalPrice - discountAmount   1. Display output | discountAmount  discountPrice |

Code-

//Dylan Nguyen, 9/1/2020

//Chapter 2 Quiz- #2) Sales Discount

#include <iostream>

#include <iomanip>

using namespace std;

int main()

{

double originalPrice, discountAmount, discountPrice;

cout << "Enter original price:\n";

cin >> originalPrice;

discountAmount = originalPrice \* 0.10;

//setprecision(2) for only 2 decimal places as money only has 2 decimal places

cout << fixed << setprecision(2);

cout << "Discount Amount: " << discountAmount << endl;

discountPrice = originalPrice - discountAmount;

//setprecision(2) for only 2 decimal places as money only has 2 decimal places

cout << fixed << setprecision(2);

cout << "Discount Price: " << discountPrice << endl;

system("pause");

return 0;

}