

CECS 2222-22

Actividad 1.1

12 de marzo de 2022

Código fuente:

```
#include <iostream>
#include <iomanip>
using namespace std;

//esta parte pertenece al archivo Stock.h
class Stock{

    private:
        float shares, pps, comm;
        //comm es el porciento de comision

    public:
        Stock(); //default constructor
        Stock(float, float, float); //constructor con parametros
        ~Stock();

        //mutators
        void setShares(float);
        void setPrice(float);
        void setComm(float);
        void setAll(float, float, float);

        //accessors
        float getShares() const;
        float getPrice() const;
        float getTruePrice() const;
        float getComm() const;
        float getCommPrice() const;
        float getTotal() const;
        void display() const;

};

//esta parte pertenece al archivo Stock.cpp
Stock::Stock(){
    setShares(0);
    setPrice(0);
    setComm(0);
}
```

```
Stock::Stock(float aShares, float aPps, float aComm){
    setShares(aShares);
    setPrice(aPps);
    setComm(aComm);
}

void Stock::setAll(float aShares, float aPps, float aComm){
    setShares(aShares);
    setPrice(aPps);
    setComm(aComm);
}

Stock::~~Stock(){
    cout << "\nThank you for using our services.\n";
}

void Stock::setShares(float aShares){
    shares = aShares;
}

void Stock::setPrice(float aPps){
    pps = aPps;
}

void Stock::setComm(float aComm){
    comm = aComm;
}

float Stock::getShares() const{
    return shares;
}

float Stock::getPrice() const{
    return pps;
}

float Stock::getComm() const{
    return comm * 0.01;
}

float Stock::getTruePrice() const{
    return getPrice() * getShares();
}

float Stock::getCommPrice() const{
```

```
        return getTruePrice() * getComm();
    }

float Stock::getTotal() const{
    return getTruePrice() + getCommPrice();
}

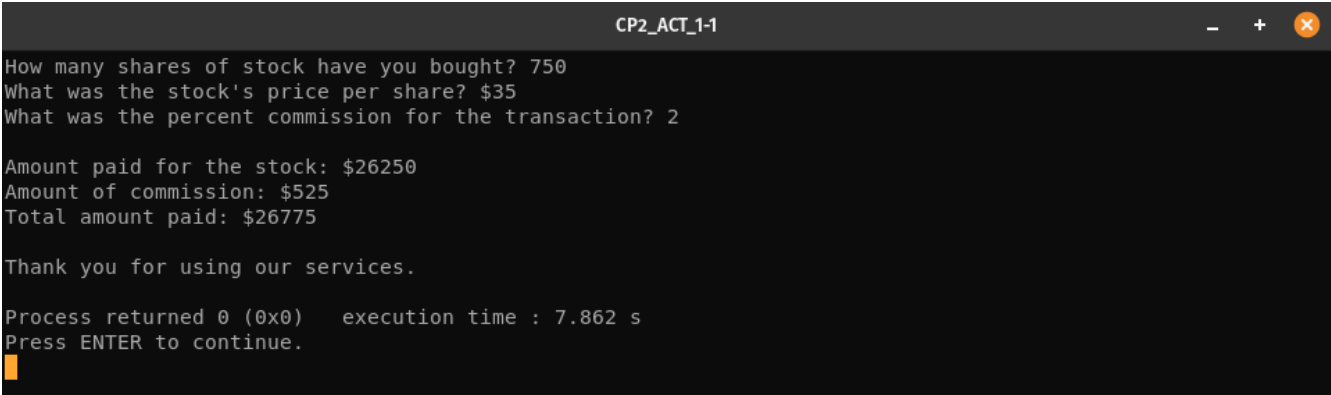
void Stock::display() const{
    cout << "\nAmount paid for the stock: $" << getTruePrice() << "\n";
    cout << "Amount of commission: $" << getCommPrice() << "\n";
    cout << "Total amount paid: $" << getTotal() << "\n";
}

//esta parte pertenece al archivo main.cpp
int main(){

    Stock stonk;
    float Shares=0, PricePShare=0, Commission=0;

    cout << "How many shares of stock have you bought? ";
    cin >> Shares;
    cout << "What was the stock's price per share? $";
    cin >> PricePShare;
    cout << "What was the percent commission for the transaction? ";
    cin >> Commission;
    stonk.setAll(Shares, PricePShare, Commission);
    stonk.display();

    return 0;
}
```

Ejecución:A screenshot of a terminal window titled "CP2_ACT_1-1" with standard window controls (minimize, maximize, close). The terminal displays the execution of a C++ program. It prompts the user for three inputs: the number of shares (750), the price per share (\$35), and the percent commission (2). It then calculates and displays the amount paid for the stock (\$26250), the commission (\$525), and the total amount paid (\$26775). After a thank you message, it shows the process return code (0) and execution time (7.862 s), and prompts the user to press ENTER to continue. A small orange cursor is visible at the bottom left.

```
CP2_ACT_1-1
How many shares of stock have you bought? 750
What was the stock's price per share? $35
What was the percent commission for the transaction? 2

Amount paid for the stock: $26250
Amount of commission: $525
Total amount paid: $26775

Thank you for using our services.

Process returned 0 (0x0)   execution time : 7.862 s
Press ENTER to continue.
█
```