* What are the named variables you will use?  List their names, data types, and purpose.

Int stores natural size numbers

Double stores double precision type numbers

Const stores constants

Double

Double profits

Const double sPrice = 1.75, mPrice = 1.90, lPrice = 2.00.

Const int small = 9, medium = 12, large = 15.

Int tsSold, tmSold, tlSold, sOunce, mOunce, Lounce.

* What are the unnamed variables you will use?  List their data type and purpose.

Unnamed variables are used then disappears after a return value.

Int type, int amount, both stores the number input for the menu option inputs gets used and destoryed

parsedString.first/ parsedString.second

TypeAmount in the parseString function

* What input data is needed by the program?

You choose from a menu option, you either enter 1, 2, 3 then the quantity of coffee of the size you want, or 4, 5, 6 to get the running total of cups sold, ounces sold, money made.

* What output data is generated by the program?

The outputs total cost of the single purchase, running total of cups sold for s,m,l, and total, running total of amount in ounces sold in s,m,l and total, running total of money made for s,m,l and total, option to press enter to continue.

* Describe how the input data will be transformed into the output data.

-This used object oriented prigramming which has a header file and 2 cpp files.

-The main function gets called.

-The main function calls the CoffeeShop function

-The menu of options gets displayed

-You have choices:

1 for small coffee, the enter a comma, then enter quantity

2 for medium coffee, the enter a comma, then enter quantity

3 for large coffee, the enter a comma, then enter quantity

- It uses the parseString function to effectively sort out the numbers.

- after each input, the cost gets displayed using the sellCoffee function, which only applys when you enter 1,2, or 3.

- in the sell coffee function there are 3 cases that can be called which are 1, 2, or 3, each corresponds to small, medium, and large respectively.

-This function calculates and prints the cost of the coffees and keeps track of the running total cost, ounces, and cups sold using the variable amount: profit = cups sold \* price constant, ounces sold = cups sold \* ounce constant, and cups sold = cups sold.

-Every time you enter the coffee you want and quantity, you are then asked to press enter to continue, it goes back to the main function and prints the menu of options again.

- If you press 4: total cups of small, med, large, and total overall cups gets displayed using the tsSold, tmSold, tlSold variables to keep the running total.

- If you press 5: total ounces of each size and overall ounce gets displayed using the sOunce, mOunce, and lOunce to keep track of the total ounces.

- if you press 6: the total money made of each cup and total money made gets printed using by multiplying each total cups sold, by the constant prices of each cup. The total money made is the sum of all 3 sizes.