

Script started on 2025-06-16 14:18:30-05:00 [TERM="xterm" TTY="/dev/pts/100" COLUMNS=80]
kn55307@ares:~/Portfolio 1/weighty subject lab\$ pwd

/home/students/kn55307/Portfolio 1/weighty subject lab
kn55307@ares:~/Portfolio 1/weighty subject lab\$ cat weightysubject.info

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CSC121-001

Welcome Activity

Level 3

This program allows users to input a select amount of ounces to be translated into

weightysubject.cpp:

```
1 #include <iostream>
2 #include <limits>
3 #include <cmath>
4
5 int main() {
6     const double OUNCES_IN_POUND = 16.0;
7     std::cout << "\n\t\tWelcome to the Ounce Conversion Program!!!" << std::endl;
8
9     double ounces;
10    std::cout << "How many ounces do you have? ";
11    std::cout << "Enter the number of ounces: ";
12    std::cin >> ounces;
13    std::cin.ignore(std::numeric_limits<std::streamsize>::max(), '\n');
14
15    double pounds = floorf(ounces / OUNCES_IN_POUND);
16    double ounces_remainder = ounces - (pounds * OUNCES_IN_POUND);
17    double pounds_total = ounces / OUNCES_IN_POUND;
18    std::cout << "\n\t\t" << ounces << " oz. is equivalent to " << pounds << " lbs." << std::endl;
19    std::cout << "\n\t\tThank you for using the OCP!!!" << std::endl;
20    std::cout << "\n\t\tHave a great day!" << std::endl;
21    return 0;
22 }
```

kn55307@ares:~/Portfolio 1/weighty subject lab\$./weightysubject.out

Welcome to the Ounce Conversion Program!!!
How many ounces do you have? Enter the number of ounces: 68

68 oz. is equivalent to 4 lbs. and 4 oz. (4.25 lbs.).

Thank you for using the OCP!!

Have a great day!

kn55307@ares:~/Portfolio 1/weighty subject lab\$./weightysubject.out

Welcome to the Ounce Conversion Program!!!
How many ounces do you have? Enter the number of ounces: 24 ounces please!

24 oz. is equivalent to 1 lbs. and 8 oz. (1.5 lbs.).

Thank you for using the OCP!!

Have a great day!
kn55307@ares:~/Portfolio 1/weighty subject lab\$./weightysubject.out

Welcome to the Ounce Conversion Program!!!
How many ounces do you have? Enter the number of ounces: 68 ounces....

68 oz. is equivalent to 4 lbs. and 4 oz. (4.25 lbs.).

Thank you for using the OCP!!

Have a great day!
kn55307@ares:~/Portfolio 1/weighty subject lab\$ cat weightysubject.tpq

1. What value is the constant in this program? What [data] type of value is it? What is its value?

A constant named OUNCES_IN_POUND is defined as a constant double with the value 16.0.

2. What variables do you have in this program? What are their data types?

The double variable ounces represents the number of ounces the user inputs. The double variable pounds represents the whole pounds.

3. How can you get both the decimal total pounds and the whole pounds with remainder?

You can create new variables that operate on a single input value without altering the original value.

4. What happens if the user types a fractional number of ounces to begin with? (I.e. 1.5 ounces)

The decimal is factored into the remaining ounces value.

5. What happens if the user accidentally types a symbol or letter instead of their

The program ignores it since it is not a numerical value and sets/keeps ounces

User-Entered Digits TPQs

1. If the user's input is potentially followed by garbage (well, textual informati

We can include a `cin.ignore` statement right after the usual `cin >> ounces` state

2. Does this facility require anything other than our usual `#include of iostream` at

(What else do we need? Where do we get it? What does it normally represent? What do

`<limits>` should be included to use `std::numeric_limits<std::streamsize>::max()`.

3. Why don't we need/use the string data type in this situation? (Doesn't string al

Using a string would require us to convert the string back to a double in order

exit

Script done on 2025-06-16 14:19:54-05:00 [COMMAND_EXIT_CODE="0"]