```
Script started on 2025-06-17 08:32:49-05:00 [TERM="xterm" TTY="/dev/pts/0" COLUMNS=
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!!!"
     8       << std::endl;
     9
    10      double ounces;
    11      std::cout << "How many ounces do you have? ";
    12      std::cout << "Enter the number of ounces: ";
    13      std::cin >> ounces;
    14      std::cin.ignore(std::numeric_limits<std::streamsize>::max(), '\n');
    15
    16      double pounds = floorf(ounces / OUNCES_IN_POUND);
    17      double ounces_remainder = ounces - (pounds * OUNCES_IN_POUND);
    18      double pounds_total = ounces / OUNCES_IN_POUND;
    19      std::cout << "\n\t\t" << ounces << " oz. is equivalent to " << pounds
    20       << " lbs. and " << ounces_remainder << " oz. (" << pounds_total
    21        << " lbs.)." << std::endl;
    22      std::cout << "\n\t\tThank you for using the OCP!!" << std::endl;
    23      std::cout << "\n\t\tHave a great day!" << std::endl;
    24      return 0;
    25  }
```

```
kn55307@ares:~/Portfolio 1/weighty subject lab$ CPP weightysubject

weightysubject.cpp***
weightysubject.cpp: In function ‘int
main()’:
weightysubject.cpp:16:35: warning:
conversion from ‘double’
to ‘float’ may change value
[-Wfloat-conversion]
   16 |     double pounds = floorf(ounces /
   OUNCES_IN_POUND);
      |
      ~~~~~~~^~~~~~~~~~~~~~~~~


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: 64

                64 oz. is equivalent to 4 lbs. and 0 oz. (4 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: 64 ounces, please!

                64 oz. is equivalent to 4 lbs. and 0 oz. (4 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: 1283

                1283 oz. is equivalent to 80 lbs. and 3 oz. (80.1875 lbs.).

                Thank you for using the OCP!!

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

cat: ws.tpq: No such file or directory
kn55307@ares:~/Portfolio 1/weighty subject lab$ cat ws.tpq

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

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

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

3. How can you get both the decimal total pounds and the whole pounds with remainin
```

```
    You can create new variables that operate on a single input value without alte

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

    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 informatio

    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

    <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
kn55307@ares:~/Portfolio 1/weighty subject lab$ exit

exit

Script done on 2025-06-17 08:34:11-05:00 [COMMAND_EXIT_CODE="0"]
```