

PIC-10A: Homework 1

Due 10/08/21 11:59pm via CCLE

Problem 1:

Write a program that displays the perimeter, area, and diagonal of a letter-size (8.5×11 inches) sheet of paper in millimeters. There are 25.4 millimeters per inch. Use constants in your program.

Submit your file as *hw1_1.cpp*

Problem 2:

Write a program that asks the user to enter a time duration in seconds (whole number). Then print out the time in “hour - minute - second” format. Let assume that the user’s input is always valid, i.e. they always enter an integer.

Example: if the user enters 12034, then the program will print out “3 hours 20 minutes 34 seconds”

```
Please enter a time duration in seconds (whole number): 12034
3 hours 20 minutes 34 seconds
```

Submit your file as *hw1_2.cpp*

Problem 3:

Write a program that asks the user to enter two integers from 0 to 100000. Then display the sum, difference, product, and average of these two numbers

Example:

```
Please enter the first number from 0 to 100000: 3571
Please enter the second number from 0 to 100000: 1200
Their sum is 4771
Their difference is 2371
Their product is 4285200
Their average is 2385.5
```

Hint: You need to choose appropriate data types. Make sure that your program works for all integers in the given range [0,100000]. Remember to check overflow.

Submit your file as *hw1_3.cpp*