Lab Report 6

# Problem

We need to create a program that will convert seconds into minutes, hours, or days depending on how many seconds the user enters.

# Proposed Solution

Start

Ask user for a number of seconds

Seconds >= 86400

No?

seconds >= 3600

Yes?

Convert seconds to days and print

No?

Seconds >= 60

Yes?

Convert seconds to hours and print

No?

Print out seconds

Yes?

Convert seconds to minutes and print

End

# Tests and Results

I tested that the program works with every condition, and I tested it with none of the conditions working and it works fine.

# Problems Encountered

The only problem I ran in to was trying to make all of my variables (except seconds) as final variables. I realized my obvious mistake and fixed it with ease.

# Conclusions and Discussion

An easier way to write this program would be to not even bother much with the other variables and just calculate for minutes, hours, and days while only using the seconds.

# Additional Questions

1. In the proposed solution section, draw a flowchart to represent your solution.

2. Can you store a value of type ‘double’ inside a variable of type ‘int’ by default? Do we have any alternative ways to achieve this goal? Explain using an example.

No, an int variable is too small. However, you could use the (int) syntax in order to convert a double into an int.

For example:

double seconds = 60.0;

(int)seconds = 60;