Assignment 4
Due: 12 noon, on 10, 7, 1994
Grader: Gary Zipfel Rm 1349

Purpose

The purpose of this assignment is to write a SAL program that deals with both number systems and data types.

Problem

The program reads in a base 3 integer (greater than or equal to zero), and prints out the integer in decimal and hexadecimal.

Several sample runs of the program might look like:

```
Enter a base 3 integer: 112
In decimal, the integer is 14
In hexadecimal, the integer is e

Enter a base 3 integer: 1021
In decimal, the integer is 34
In hexadecimal, the integer is 22

Enter a base 3 integer: 301
Input error, not a base 3 integer -- quitting.
```

Requirements

The following requirements must be followed to receive full credit for the assignment. All `get` and `put` instructions in the program must have the operand declared with `.byte`. The program may **not** do `get` or `put` instructions on variables declared with `.word`. You may assume that the integer entered by the user will be small enough that it will not cause overflow. If your program encounters illegal input, it should print an error message followed by a linefeed and halt. The program must contain procedures. One good organization is to have one procedure to get the input and another procedure for displaying an integer in a given base.

How to turn in your assignment

You are to turn in the source code for your program by using the `handin4` program. When you have completed the assignment, hand in your source code by typing:

```
~cs354-1/bin/handin4 filename
```

where `filename` is the file containing the source code. You may receive feedback from the grader of your assignment by handing in a printout of your source code.