

Homework Five

Due Friday 3 February, 2007

This is a fairly major assignment. It is designed to give you practice writing a longer program, and also to review most of the key topics that we've covered thus far.

Your task main task is to write a function that takes as input an integer between 1 and 999. The function should return the English word for that number. E.g., let's call our function `numbername`. Then `numbername(73)` would return "seventy three." Some additional requirements and specifications:

1. Do not accomplish this task with 999 `if` statements. Keep your use of `if` statements to a bare minimum!
2. Do not worry about capitalization. Use all lower-case.
3. You should make wise use of functions. You will probably need to design a handful of different functions to accomplish this task.
4. Write a program that makes use of your function. This program should ask the user to enter a number, and then respond by printing the word for that number to the screen. The program should let the user do this as many times as he or she wants before exiting.
5. This program should give an error message if the user enters a number that is less than 1 or more than 999.
6. If you're feeling ambitious, have the program print out the word for the number in more than one language. Use a different function for each language.
7. Be sure to comment your code and to give credit to any references you use.

Some hints and advice:

1. I suggest thinking carefully and doing some pencil and paper work before starting your code.
2. Test your program thoroughly.
3. You will need to think carefully about how to isolate the digits of a three-digit number. You will probably want to start by getting the ones digit, and then the tens, and then the hundreds. (But this isn't a requirement.)