While Loop Exercises – Part I

1. Write a program that inputs a number and determines if it’s odd or even using the following algorithm:

Input n from the user

Repeat for as long as n > 1:

Subtract 2 from n

If n is 1 when the loop finishes, then the original number was odd.

If n is 0 when the loop finishes, then the original number was even.

1. Write a program that asks the user a simple math problem. If the user guesses incorrectly, tell them so and make them guess again repeatedly until they get it right. When they finally get it right (which might be the first time), tell them “Well done!” or some other statement that boosts their self-esteem.
2. Write a program that has a number from 1 – 100 chosen in the code – the magic number. Have the user input a number as a guess. If the guess is too high, the program should print “No, the magic number is lower” and have the user guess again. Similarly, if the number is too low, the program should print “No, the magic number is higher”, and have the user guess again. The program should print “Yes! You got it!” if the number is guessed correctly, and the program should stop.